DISSERTATION

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Nonresident Father Involvement: Do Mothers and Fathers See Eye-to Eye?

An Investigation of the Impact of Reporting Discrepancies on Parameter Estimates

Lee Mizell

RAND Graduate School

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This document was prepared as a dissertation in December 2001 in partial fulfillment of the requirements of the doctoral degree in policy analysis at the RAND Graduate School of Policy Studies. The faculty committee that supervised and approved the dissertation consisted of Marc Elliott (Chair), Jacob Klerman, and Judith Seltzer.

DEDICATION

This dissertation is dedicated to my father, Luke Mizell (1945-1999), whose involvement contributed to my well-being in ways unmeasureable.

PREFACE

This research examines the implications of using mother-reported data to evaluate the relationship between nonresident fathers and the well-being of their children. It is intended to be of interest to three groups of people. First, it presents findings about data use and quality that have important implications for researchers who use or consider using proxy reports. In addition, the finding that "who you listen to matters" is important for practitioners and policymakers concerned with child and family policy. All three groups - researchers, practitioners, and policymakers - should find it noteworthy that the data tell different stories about nonresident father involvement and child well-being depending on whose reports are used.

The purpose of this research is not to identify "the truthful parent." It is not to imply that mothers or fathers are not telling the truth about nonresident fathers' characteristics or behavior. Rather it is to explore the possibility that mothers and fathers experience parenting and the interparental relationship differently, and that failure to incorporate both parties' perspectives may lead to inaccurate, inappropriate, or underdeveloped conclusions, policies, and programs. My aim has been to investigate the hotly debated issue of the nonresident father's perspective in a systematic manner using the tools of policy analysis.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

AKNOWLEDGEMENTS

On the path to completing this dissertation I learned many lessons - about data, about analysis, and about parents and children. I am indebted to a handful of individuals for these valuable lessons and for ensuring the quality of this research. First and foremost I extend heartfelt thanks to my committee, Marc Elliott, Jacob Klerman, and Judith Seltzer. Their superior technical supervision and creativity kept me on-track and helped me transform an idea into a coherent and meaningful "story" about fathers and families. Their commitment to this process and my gratitude cannot be overstated.

I would also like to extend appreciation to my external reviewer Dr. David Ellwood, Harvard University, for his patience and thoughtful comments. I also benefited from the insightful comments of Amy Cox, who came to my rescue with clarity and organization right when I needed it. I must extend special thanks to my mother, JoAnn, who believed me when I said I could do this in a timely manner - and held me to that goal.

Finally, the acknowledgements would not be complete without sincere thanks to Gustav Lindström, a dear friend whose willingness to read and edit this and other work along the way enabled me to juggle multiple projects and still finish my dissertation on-time. I appreciate your kindness, your time, and your ear.

Thank you.

CHAPTER 1 : BACKGROUND AND POLICY CONTEXT

Pro-father and father involvement initiatives are in the policy spotlight. State-level demonstration programs, innovative initiatives, community-based collaborations, and family court reforms are emerging in significant number. All fifty states are implementing some policy framework to promote responsible fatherhood. President Clinton repeatedly referenced fathers, father involvement, and child support programs in the State of Union address over the years. The White House introduced multiple initiatives to promote responsible fatherhood. President Bush has proposed a program for incarcarated fathers and their children. Why the interest in fathers?

Interest in fathers is not new. According to one count, over 4,000 articles have been published on the subject of fathers and families (Lamb, 1996). What has caught the attention of the public and of policymakers is a handful of startling statistics. In 1998, single-parent families comprised 27 percent of family households with children in the United States - up from 24 percent in 1990 and from 11 percent in 1970 (U.S. Bureau of the Census, 1998). Eighty-four percent of these children in single parent households live with their mother (U.S. Bureau of the Census, 1999). The relationship with poor child outcomes is notable. Even after controlling for differences in income, children who live with single parents are more likely to fail at school, suffer emotional or behavior problems, get involved in criminal activity, use illicit substances, smoke cigarettes, abuse alcohol, and engage in premature and promiscuous sexual activity (Horn, 2000). These associations of concern to policymakers because 51 percent of black children, 27 percent of Hispanic children, and 18 percent of white children live with their mother only (U.S. Bureau of the Census, 1999).

In response to such statistics, policymakers and community organizations have turned their attention to issues related to father absence and father involvement. Current policy actions include promoting enhanced custody and visitation arrangements, parent education and mediation programs for separated or divorced families, public awareness of father involvement, preventing teen fatherhood, promoting fathers as economic providers, strengthening fathers as nurturers, and enhancing state or community leadership capacity (Knitzer and Bernard, 1997).

The research used to guide policy and programming decisions is these areas suffers an important shortcoming. To date, the bulk of research regarding the impact of nonresident father involvement on child welfare has used mothers', not fathers', reports of nonresident fathers' characteristics and behavior. It may be the case that mothers misrepresent the level and nature of nonresident father involvement with their children. If so, what we know from research about the impact of nonresident father involvement on child well-being may be biased. Policies and programs based on research that relies on mothers' proxy reports may be poorly framed. While some of the constructs of interest in research on nonresident father involvement can be objectively evaluated (i.e. child support payment), many constructs are subjective phenomena (i.e. closeness to father) for which no truth can be discerned. As such, it is unlikely that researchers can know which respondent is "right," but they should be concerned with patterns of discrepancies and their implications for interpretation of parameter estimates. "[C]ouple data are essential if we want to understand the relationship between parents who live apart. Mothers can provide reasonably accurate information on child support payments and visitation, but they cannot report on the father-child relationship or

on many other aspects of nonresident fathers' lives (Garfinkel, et al., 1998)."

The use of mother-reported data to examine issues related to fathers and to guide policy stems largely from the difficulty associated with collecting nationally representative nonresident father-reported data on their characteristics, involvement with their child, and child outcomes. What limited data do exist focus on divorced or separated parents in panel surveys such as the in National Survey of Families and Households or in the Survey of Income and Program Participation. Studies that incorporate the nonresident fathers' perspective frequently use qualitative data gathered from interviews or focus groups for illustration (Koch and Lawry, 1984; Waller and Plotnick, 1999), data from court-based samples (Bay and Braver, 1990; Braver, Fitzpatrick, and Bay, 1991; Braver et al, 1991), and/or child support enforcement records (Sonenstein and Calhoun, 1988).

Each type of data has advantages and disadvantages. While focus groups can provide substantive insight, their obvious disadvantage is that data are neither nationally representative nor amenable to quantitative analysis. Court-based samples are problematic because fathers of children born out-of-wedlock are underrepresented, as are those who are not court-involved. Similarly, child support records are only generalizable to those families with a child support order. Both court-based samples and child support records have the advantage that both the resident and nonresident parent can be identified through administrative records. By contrast, in large nationally representative datasets it is usually the case that the primary caregiver of a child provides information about both the child and his or her relationship with the absent father. Although it is possible to target the

nonresident father as the primary respondent and trace the mother and child through him, generally this is not done because mothers are usually easier and cheaper to identify and survey. It is also the case that fathers tend to underreport their parental status (Sorensen, 1997). Thus, researchers who wish to use nationally representative datasets to examine the consequences of father absence or involvement are frequently restricted to use of mother-reported data.

The primary reason for the paucity of nationally representative nonresident father data for use in family oriented research is that collecting such data is difficult and, as a result, costly. Collecting the data is difficult because 1) it is hard to identify separated and nonmarital families during the screening phase of survey data collection, 2) once families have been screened, if it is often that case that one must rely on the resident parent for identification of the nonresident parent, and 3) response rates among nonresident parents must be sufficient to generate sufficient sample size to support detailed multivariate analysis (Schaeffer, Seltzer, and Dykema, 1998). It is frequently the case that response rates among nonresident fathers are too low to generate sufficient, and unbiased, samples that can be used for such analysis.[1]

If resident mothers are good proxy reporters for nonresident fathers regarding the father-child relationship, incurring additional costs to overcome these obstacles in data collection may not be worthwhile. In fact, were mothers' and fathers' reports exactly the same, it would not matter from whom the data were collected. If mothers

[1] The biased introduced by unit nonresponse is discussed in detail later. At this point it is sufficient to note that if nonresponding fathers are systematically different from those that do in a way that is associated with variables of interest, estimation of means, proportion, regression coefficients, and other parameters will be biased.

do not accurately describe nonresident fathers' characteristics and behaviors, then research and policy making should use both mothers' and fathers' reports when determining what policies serve the best interests of children. "[F]urther research is needed on which areas previous partners or children are able to serve as proxy respondents and which ones require the additional expense of locating and interviewing the fathers to achieve the needed accuracy and reliability." (Cherlin and Griffith, 1998)

RESEARCH GOALS AND RESEARCH QUESTIONS

It is the goal of this research to investigate the implications of using resident mothers' proxy reports for nonresident fathers' characteristics and behaviors using paired nationally representative data. It:

- Corrects for some of the nonresponse bias introduced into the subsample of divorced/nonmarital families by low nonresident father response rates by creating new analytic weights;
- Uses these new weights when analyzing discrepancies in reporting;
- Evaluates the impact of using father- versus mother-reported data on estimates of nonresident father involvement on child well-being by conducting regression analysis using both types of data; and
- Links these findings to research, policymaking, and practice.

Ultimately, this research answers five questions:

1. Are there discrepancies between mothers' and nonresident fathers' reports of nonresident fathers' characteristics and behaviors?

2. Do these discrepancies occur systematically in a manner that potentially underrepresents nonresident fathers' involvement with and on behalf of their children?

3. Do reporting discrepancies cause parameters estimates to vary depending on whose reports are used?

4. Does information about these discrepancies help us understand variation in child well-being?

5. What are the implications for future research and policymaking?

In answering these questions this dissertation makes three contributions to the body of existing research on nonresident fathers and families and to policymaking and practice. First, it reveals how using paired data for traditionally difficult-to-survey families may be biased in the absence of a nonresponse correction. Second, it identifies if and/or which parameter estimates in existing research that use mothers as proxy reporters for nonresident fathers might be biased. Finally, because social policies and programs frequently target difficult-to-reach populations, this study illuminates the question of whether or not it is worthwhile to allocate additional resources to collect data from them.

DATA

To address these issues, this study exploits paired mother-nonresident father data from the 1997 Child Development Supplement of the Panel Study of Income Dynamics (PSID CDS). The PSID CDS is among the leading longitudinal dataset of individuals and their families in the United States.[2] One of the major uses of the Panel Study of Income Dynamics (PSID) has been to examine the consequences of children's home and school experiences with later success in life. The Child Development

[2] The leading nationally representative longitudinal dataset used to analyze parent-child relations is the Child Supplement of the National Longitudinal Survey of Youth (NLSY). Those data are not used here because paired mother-absent father data are not available.

Supplement is unique in that it is the first nationally representative sample to collect paired data from both mothers and previously married and never-married nonresident fathers.

SUMMARY

To achieve the research objectives set forth here, I begin by reviewing the existing literature on nonresidents fathers and their involvement with their children in Chapters 2 and 3. I also discuss why what we know from existing research may be biased and review related literature. Chapter 4 presents the methodology and outcomes associated with the generation of new sampling weights to adjust for nonresponse among nonresident fathers. Using these new weights, I describe the sample of respondent caregivers, children, and nonresident fathers in Chapter 5. Chapters 6 examines the patterns of report discrepancies and Chapter 7 addresses the question: Do conclusions about the impact of father involvement on child well-being change if existing research is replicated using father reports? Finally, in Chapter 8 I relate the findings of this research to existing research, policymaking, and practice.

CHAPTER 2 : WHO ARE NONRESIDENT FATHERS?

The goal of this chapter is to develop a profile of nonresident fathers while outlining the methodological challenges in doing so. The first part of the chapter discusses the limitations of the data currently available to develop a comprehensive profile of these men. The second part of the chapter identifies and summarizes two studies that address these data limitations directly. The profile generated from these studies is complemented with additional data on divorced and never-married fathers in the third and final part of this chapter.

METHODOLOGICAL ISSUES ASSOCIATED WITH DESCRIBING NONRESIDENT FATHERS

A profile of nonresident fathers is difficult to generate for a number of reasons. First, many studies that examine the relationship between nonresident fathers and their children do not describe the characteristics of these men in any great detail (King, 1994). Other studies that focus on child support payment tend to describe these men primarily in terms of their age, education, and earnings - or focus on low-income nonresident or unwed fathers (Mincy and Sorensen, 1998; Doolittle et al, 1998; Sorensen, 1997; Bloom and Sherwood, 1994; Lerman, 1993; Veum, 1992; Marsiglio, 1987).

Second, there is limited nationally representative data on nonresident fathers. Ideally a profile of nonresident fathers would be developed using father-reported survey data that represent the population of nonresident fathers. Unfortunately, such data do not exist. Most data on these men come from surveys of children who have a nonresident father. Custodial parents are generally relied on to provide information about these men or to help identify their whereabouts for

survey efforts. This is the case with the Current Population Survey Child Support Supplement, as well as the National Longitudinal Survey of Youth, Child data. This approach is problematic because many custodial parents cannot or choose not to provide this information, and because it assumes that mothers are good proxy reporters for nonresident fathers. However, there are studies that use information from both the mother and the nonresident father. These studies often use paired data generated from court-samples that underrepresent families that are not court-involved, paired data from recently separated couples that excludes couples that have never been married or cohabitated, or data that are not nationally representative (Smock and Manning 1997; Sonenstein and Calhoun, 1988).

There are two nationally representative household surveys that do collect data directly from men: The National Survey of Families and Households (NSFH) and the Survey of Income and Program Participation (SIPP). Unfortunately, neither of these datasets adequately represents the entire population of nonresident fathers. Institutionalized fathers, undercounted minorities, and fathers who never lived in the sampled household are not represented in the data. The NSFH, analyzed by Garfinkel et al (1998), is a national sample of over 13,000 respondents from the adult population taken in 1987-88 and followed up in 1992-93. The latter is panel data collected on a sample of nationally representative households, with sample sizes ranging from 14,000 to over 36,000 households. Unlike the SIPP, nonresident fathers with minor children living with their mother can be directly identified in the NSFH. The SIPP asks men how many children they have fathered and if they pay child support. However, it is difficult to determine if the father's child is a minor and if the child resides with his or her mother (versus another caretaker) (Garfinkel et al, 1998).

There are three main reasons why identifying nonresident fathers through their own reports does not produce nationally representative data. First, household surveys generally exclude institutionalized individuals and overseas military personnel, both of which include nonresident fathers. Second, these surveys reflect the 1990 Census undercount of minority populations. Finally, not all nonresident fathers report themselves as such. They may not know they have children and/or they may refuse to acknowledge them (Sorensen, 1997). Fortunately two studies on nonresident fathers address these issues directly, producing useful estimates of nonresident father characteristics. These studies are described in the next section.

A PROFILE OF NONRESIDENT FATHERS OVERALL

With the data limitations in mind, what can we say about nonresident fathers? The best profiles of these men come from a 1997 study and a 2000 study of nonresident parents' characteristics and child support payment (Sorensen, 1997; Sorensen and Wheaton, 2000).[3] The former study examines the underrepresentation of nonresident fathers in both the National Survey of Families and Households (NSFH) and the Survey of Income and Program Participation (SIPP). While the NSFH asks men directly about the presence of children that do not live with them, an indirect approach to identifying nonresident fathers must be used with the SIPP. Sorensen and Wheaton (2000) improve upon the earlier analysis by using health insurance information to identify nonresident fathers. In both studies the author(s) reweights the sample to produce a

[3] Sorenson and Wheaton's portrait of nonresident fathers is similar to a "patchwork portrait" generated by Garfinkel et al (1998) using data from the 1987 National Survey of Families and Households adjusted for underrepresentation of men in the military, men

profile of nonresident fathers representative of the entire population of nonresident fathers, including those absent due to the census undercount, incarceration/institutionalization, or military service. The overall undercount of all nonresident fathers is indicated by a discrepancy in the number of custodial mothers in the population (10.2 million) and the number of self-identified nonresident fathers (8 million) (Sorensen and Wheaton, 2000).[4] By adjusting for the undercount, the profiles are more accurate than other studies that use the NSFH or SIPP without such an adjustment.

In the later study Sorensen and Wheaton reweight the SIPP by making assumptions about which identified nonresident fathers were similar to omitted nonresident fathers. Incarcerated/institutionalized nonresident fathers are assumed to be like identified nonresident fathers who do not pay child support and have family incomes below the official poverty threshold. Nonresident fathers omitted due to military service overseas are assumed to resemble the military nonresident fathers present in the SIPP. Those absent due to the census undercount are assumed to be like identified nonresident fathers with family incomes below the official poverty threshold. Finally, there are nonresident fathers present in the SIPP but not identified as such. Their presence is indicated by the fact that more mothers reported receiving child support than fathers who reported paying it. In order to make these two figures match:

> "Payers and nonpayers are allocated into impoverished and nonimpoverished payers and nonpayers, based on the percentages of

undercounted in the U.S. Census, and incarcerated men. Results of the former study are used here because the weighting adjustments made to the data are more comprehensive.

[4] It is important to point out that if men have more than one child, multiple women will indicate they are mothers but only one man will indicate he is a father. As such, it is not necessarily true that there should be an equal number of custodial mothers and nonresident fathers. There should be an equal number of children with an absent father as reported by the custodial mother as there are children reported by absent fathers.

identified SIPP black and nonblack payers and nonpayers who are impoverished. After reweighting, the number of nonresident fathers matches the number of custodial mothers. About 45 percent of nonresident fathers report paying child support, compared to 46 percent of custodial mothers, and the number of nonresident fathers of each race and ethnicity (black, white, Hispanic, and other) is within two percentage points of the corresponding number of custodial mothers." (Wheaton, 2000)

The new weighting scheme used by Sorenson and Wheaton (2000) in conjunction with the 1993 SIPP data is described in Table 2.1.

Table 2-1: Adjusted sample weights applied to 1993 SIPP data by Sorensen and Wheaton, 2000.

	Black	Nonblack
Civilian Nonresident Fathers Under Age 55		
Impoverished* Payers	2.3790	1.5583
Impoverished Nonpayers	1.9567	1.4810
Non-impoverished Payers	1.5248	1.0942
Non-impoverished Nonpayers	1.1247	1.0130
Military Nonresident Fathers**	1.4742	0.6658
Institutionalized Nonresident Fathers***	0.7191	0.4022
Nonresident Fathers Aged 55 and Over	1.0000	1.0000

* "Impoverished" means having family income below the official poverty threshold based on family size.

** In comparing SIPP counts of men in the military to Census data, the SIPP finds more non-black military men than actually exist in the entire military, including barracks and overseas. The number of black military men in the SIPP exceeds the number not in barracks or overseas, but is less than the total in the armed forces. The adjusted weights correct for this.

*** Since the institutionalized are excluded from the SIPP, the authors created dummy records for them by duplicating the records of impoverished nonpayers, but set to zero their financial and work data. The institutionalized weight adjustments are then applied to the copied records, and the impoverished nonpayer weight adjustments are applied to the original set of records.

(Table replicated from Sorensen and Wheaton (2000))

Reweighting make the SIPP data particulary useful for describing nonresident fathers. Table 2.2 summarizes the characteristics of nonresident fathers using Sorensen and Wheaton's study, and contrasts these characteristics with those of resident fathers described in the earlier article (Sorensen, 1997).

Table 2-2: Characteristics of Nonresident Fathers Overall

		Nonresident 1993 SIPP	Resident 1990 SIPP
Racial Composition			
	White	58%	79%
	Black	27%	7%
	Hispanic	13%	10%
	Other	2%	4%
Educational Attainment			
	Less than high school degree	25%	16%
	High school degree/GED	45%	------
	Some college	30%	------
	Bachelor's degree or more	(15%)	28%
	Mean education (years)	(12.3 yrs)	13.1 yrs
Marital Status			
	First marriage	19%	82%
	Remarried	23%	13%
	Previously Married	24%	4%
	Never married	24%	1%
Age			
	17-24	11%	------
	25-34	35%	------
	35-44	42%	------
	45-54	11%	------
	55+	1%	------
	Mean age	(36 yrs)	37 yrs
Work Status			
	Work full-time all year	56%	------
	Work part-time, part year	25%	------
	No work/incarcarated	19%	------
	Work 50+ weeks in a year	(73%)	86%
Income			
	Percent in poverty	20%	6%
	Mean annual personal income	($21,686)	$31,362
	Mean family income	($33,592)	$44,684
	Median family income	$26,462	------
Child Support			
	Pays child support	45%	NA
	Median payment	$2,880*	NA
		n = 1441	n= 4630

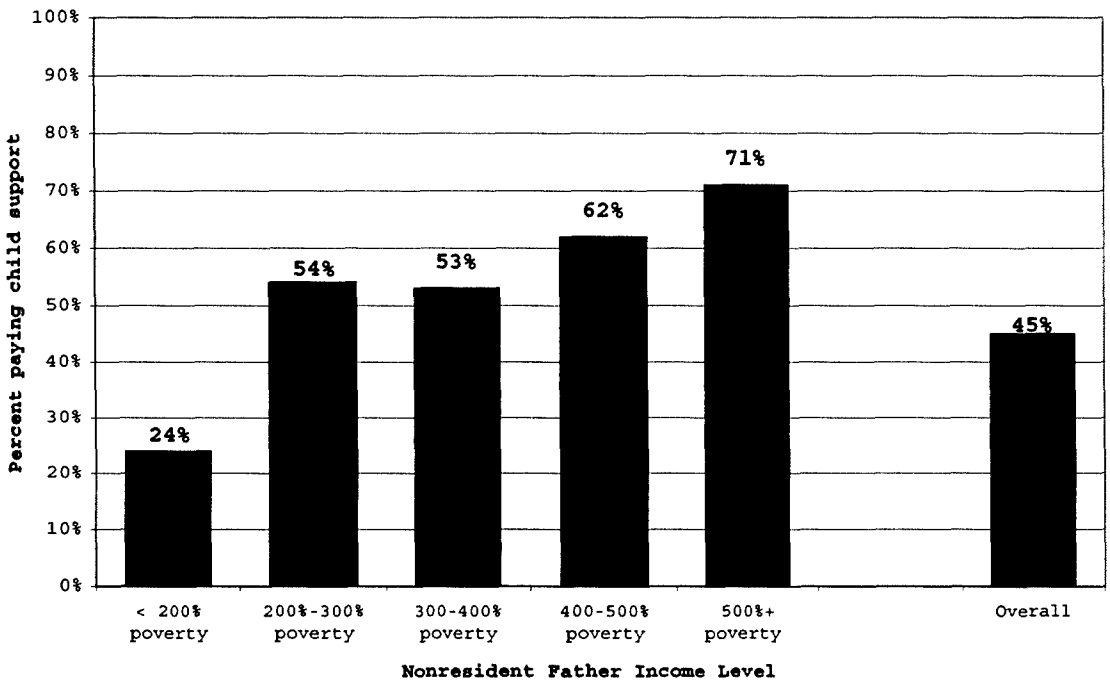
Source: Sorensen, E. and Wheaton, L. (2000). Income and Demographic Characteristics of Nonresident Fathers in 1993. Prepared for the Office of the Assistant Secretary for Plannng and Evaluation, DHHS, June 2000.; Sorensen, E. (1997). A National Profile of Nonresident Fathers and Their Ability to Pay Child Support. *Journal of Marriage and the Family*, 59 (November 1997): 785-797.

Note: Both the 2000 and 1997 publications are used because some characteristics are summarized in one publication but not in the other. Data in parentheses are from the 1997 publication. Dashes in cells indicate that comparable information on resident fathers is not available in either publication.

* Father-reported payment, which contrasts to a mother-reported median receipt of $2,160.

Table 2.2 shows that nonresident fathers are disproportionately nonwhite and less educated compared to resident fathers. Sixteen percent of resident fathers have not completed high school, as compared to 25 percent of nonresident fathers. The bulk of nonresident fathers have only a high school degree (45 percent). Almost double the percent of resident fathers have a bachelor's degree or more (28 percent) relative to nonresident fathers (15 percent).

Figure 2.1: Relationship Between Income and Child Support Payment Among Nonresident Fathers



Source: Sorensen, E. and Wheaton, L. (2000) Income and Demographic Characteristics of Nonresident Fathers in 1993. Prepared for the Office of the Assistant Secretary of Planning and Evaluation, DHHS, June 2000.

Partially due to lower levels of educational attainment, nonresident fathers are more than three times as likely to be in poverty than resident fathers, less likely to work the entire year, and earn almost one-third less than resident fathers. Levels of educational attainment and employment directly relate to fathers' ability to pay

child support. Forty-five percent of all nonresident fathers pay child support either under a formal order or agreement (37 percent) or without such a formal arrangement (8 percent). The median payment reported by all paying fathers is $2,880. It is slightly higher for those paying under a formal arrangement ($3,056) and lower for those without a formal agreement ($2,000). As Figure 2.1 shows, the percent of fathers paying child support increases with income level.

Finally, the marital history of nonresident and resident fathers differs dramatically. Whereas only one percent of resident fathers have never been married, 24 percent of absent fathers fall into this category. Fifty-seven percent of nonresident fathers have previously been married, as compared to 17 percent of resident fathers. The average age of resident and nonresident fathers is about the same.

DIVORCED AND NEVER-MARRIED NONRESIDENT FATHERS

While nonresident fathers are generally referred to as a group, it is important to distinguish between divorced and never-married nonresident fathers because the nature of their relationship with their children and with their children's mother may be different - and because their profile is not the same.

Divorced fathers

Although we know a great deal about the characteristics of divorced mothers, much less is written about divorced fathers. This is only partially attributable to the limited availability of nationally representative paired data. Unlike nonresident fathers overall, divorced fathers can be identified and described in panel surveys. Panel surveys such as the National Survey of Families and Households (NSFH), the

Survey of Income and Program Participation (SIPP), the National Longitudinal Survey of Youth (NLSY), and Panel Study of Income Dynamics (PSID) allow researchers to examine the characteristics of previously cohabitating couples with children who separate during subsequent waves of data collection. Analysis is restricted to previously married couples. Recent research using 1986-1991 panels of the SIPP to identify married couples with children living together at the wave one interview who subsequently separated provides some insight into the characteristics of divorced fathers (Bartfeld, 1998). These data are summarized in Table 2.3 and listed along side nonresident father characteristics summarized from the 1990 and 1993 SIPP. While this side-by-side presentation is intended to provide basic insights into the differences between divorced fathers and nonresident fathers overall, it is important to note that men who became nonresident fathers between 1986 and 1991 are recently divorced fathers whereas the 1990 and 1993 cross-sections include all nonresident fathers.

Table 2.3 indicates that the average divorced father is approximately 35 years old, had been married almost 11 years, and had one or two children at the time of separation. Divorced fathers are more likely to be white than resident fathers or nonresident fathers overall. However, research that examines marital patterns within racial/ethnic groups indicates that Blacks are much less likely to marry, much more likely to divorce, and much less likely to remarry once divorced than their white counterparts. "Ten years after marriage, 47% of blacks have separated or divorced compared with 28% of non-Hispanic whites." (Furstenberg, 1994) These marital patterns explain the fact that the percent of Black children living continuously with both biological parents during childhood may be as low as ten percent (Furstenberg, 1994). Divorce rates among Hispanic fathers have not been studied in

detail, but it has been postulated that Hispanics fall somewhere in between Blacks and non-Hispanic whites (Furstenberg, 1994).

Table 2-3: Characteristics of Divorced Nonresident Fathers

		Nonresident Fathers		
		Divorced Fathers 1986-1991, SIPP	All NRF 1990/93 SIPP	Resident 1990 SIPP
Age				
	Mean Age	35.4 yrs (mean at separation)	(36 yrs)	37 yrs
Race				
	White	90%	58%	79%
Marital Status				
	(Re)Married/Another Partner	4% (9 mo post-divorce)	48%	97%
	Separated/Divorced	96%	35%	3%
	Never Married	0%	18%	1%
Education				
	Mean years completed	na	(12.3)	13.1
	Less than high school	17%	25%	--------
	High school	43%	45%	--------
	Some college or more	40%	30%	--------
	College graduate	16%	(15%)	28%
Employment, Income, and Child Support				
	Working full-time	75%	56%	-------
	Part-time, part-year	18%	25%	-------
	Mean personal annual income	$29,496 (1 yr post-divorce)	($21,686)	$37,685
	Annual child support paymt	$5388* (Mean, payers 1 yr post-divorce); $3156* (Mean, all 1 yr post-divorce)	$2,160* (median)	na
	In poverty	9% (1 yr post-divorce)	20%	6%
		(n varies with statistic) n = 256 to 499	n = 1441	n= 4630

Source: Sorensen, E. and Wheaton, L. (2000). Income and Demographic Characteristics of Nonresident Fathers in 1993. Prepared for the Office of the Assistant Secretary for Planning and Evaluation, DHHS, June 2000.; Sorensen, E. (1997). A National Profile of Nonresident Fathers and Their Ability to Pay Child Support. *Journal of Marriage and the Family*, 59 (November 1997): 785-797; Bartfeld, J. (1998). Child Support and the Postdivorce Economic Well-Being of Mothers, Fathers, and Children. Institute for Research on Poverty, Discussion Paper No. 1182-98.
Note: Data in parentheses are from the 1997 publication. Dashes in cells indicate that comparable information on resident fathers is not available in either publication.
* Mother-reported receipt

Table 2.3 also shows that divorced fathers are slightly more educated than all nonresident fathers, but less educated than resident fathers. Whereas 28 percent of resident fathers are college graduates,

only 16 percent of divorced fathers are similarly educated. Divorced fathers are also employed at a higher rate than nonresident fathers overall. Nine months after separation, 75 percent of divorced fathers worked full time; 17 percent were unemployed or working sporadically. The job tenure for divorced fathers averages 5.7 years (Bartfeld, 1998). Based on the fact that divorced fathers achieve higher levels of education and higher rates of employment, their child support payments are likely to be higher than those of never-married absent fathers.

Never-married fathers

There is little research that examines the characteristics of nonresident fathers whose children were born out-of-wedlock and/or fathers who are not married. Most research on out-of-wedlock births focuses almost exclusively on the characteristics of mothers (DHHS, 1995). This is attributable to the fact that data on natality is almost always collected from the mother - despite the fact that even unmarried fathers are often present in the hospital at the birth of their child.[5] As such, a profile of nonresident fathers whose children were born out-of-wedlock must be compiled from surveys of men. Unfortunately, such fathers are less likely to self-identify in these surveys than nonresident fathers in general (Sorensen, 1997). They may choose not to identify themselves as fathers or they may not know that they are fathers. Since nonresident fathers are underrepresented in national surveys, this means that those who were unmarried when their children were born are seriously underrepresented. This makes compiling an accurate portrait of these men difficult.

[5] There has been an increase in the number of paternity establishment programs at hospitals. Consistent with the 1996 Personality Responsibility and Work Opportunity Act,

While limited, some insight into the characteristics of these men can be gleaned from research using data from the 1979 National Longitudinal Survey of Labor Market Experience, Youth Cohort (NLSY).[6] These data indicate that by age 31 never-married fathers constituted approximately six percent of all fathers ages 23 to 31. For these men, their status as unmarried fathers appears to be enduring. "Of never-married fathers in 1979, 70 percent were not married as of 1984, and 60 percent still had not married by 1988." (Lerman, 1993)

Never-married fathers are also more likely to be nonwhite than white. In particular Black men experience a much higher rate of unwed fatherhood than their White and Hispanic counterparts (Lerman, 1993; Clarke et al, 1998). Twenty percent of Black men ages 19 to 26 in 1984 were never-married fathers, as compared to approximately six percent of Hispanics, four percent of poor Whites, and one percent of Asians. Of these men, approximately 25 percent of Blacks and Hispanics report having more than one child, whereas only seven percent of Whites report similarly. By ages 23 to 31, 23 percent of Blacks, nine percent of Hispanics, five percent of American Indians, four percent of poor Whites, and four percent of Asians were never-married fathers. (Lerman, 1993)

These never-married fathers' patterns of employment are characterized by high levels instability. This is likely due to the fact that the high school dropout rate and unemployment rate are substantially higher among those who became never-married fathers than among those who did not (Lerman, 1993). As a result the median income

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the goal of these programs is to locate fathers of children born out-of-wedlock for the purposes of establishing child support orders for them.

[6] Summarizing the characteristics of unwed fathers does not capture fathers whose children were born out-of-wedlock, but subsequently married.

of never-married fathers is very low and considerably lower than the national average. In addition to experiencing lower earnings, never-married fathers are also more likely to have been involved with drugs and other criminal activities than their peers who did not become fathers. Never-married fathers are also more likely to live with their own parents than young men of the same age who do not become fathers (Lerman, 1993).

Finally, never-married fathers are less likely to pay child support than divorced fathers (Veum, 1992). This is likely to be the case because divorced fathers have higher levels of income and thus ability to pay child support, a pre-existing relationship with their children, and because they are more likely to be involved with the court system, and thus have a child support order. By contrast, in cases where children are born out-of-wedlock, only about 40 percent of children have ever had paternity established, and of those children, approximately half receive some form of child support. Approximately one-quarter of children without paternity establishment receive child support (Seltzer, 1999).

SUMMARY

Compiling a profile of nonresident fathers is clearly challenging. Much research does not describe these men in great detail. Often the information provided is based on mothers' reports. The use of mothers as proxy reporters for nonresident fathers makes sense because nonresident fathers are often difficult to locate. We have seen that relying on men to self-identify as nonresident fathers underestimates the true proportion of these men. In particular, nonwhite, never-married, low-income fathers are even less likely to self-identify than

nonresident fathers overall. Moreover, institutionalized/incarcarated men, men in the military, and men undercounted by the 1990 Census are usually omitted from or underrepresented in these samples. However, once underrepresentation in national survey data is taken into account, a portrait of the average nonresident father emerges that is useful for researchers and policymakers. These men tend to be younger, less educated, less employed, of lower income, and more nonwhite than resident fathers. But not all nonresident fathers are the same. Substantial differences exist by marital status. Divorced fathers tend to be slightly older and have higher levels of education, earnings, and employment than never-married fathers.

CHAPTER 3 : WHAT DO WE KNOW ABOUT FATHER INVOLVEMENT? WHY MIGHT WHAT WE KNOW BE BIASED?

The bulk of the research on nonresident fathers focuses on 1) the adverse consequences of their absence for child well-being and 2) what they should and could do to improve outcomes for their children. Studies that fall into the first category generally describe the child outcomes associated with living in a father-absent household. The second category of studies aims to identify ways nonresident fathers can be involved in their children's lives to prevent or mediate the negative effects of their absence. This chapter discusses what we know from the second category of literature. First, the average effects of father involvement on child well-being are summarized. Next, methodological issues that make inference from this literature challenging are introduced. Particular attention is paid to the problems introduced by the use of mothers' proxy reports of father involvement.

THE IMPACT OF NONRESIDENT FATHER INVOLVEMENT ON CHILDREN

Studies that examine the impact of nonresident father involvement on their children tend to focus on three dimensions of involvement (in order of emphasis): financial support, visitation, and parenting activities. Financial support is measured largely in terms of child support paid, and to a lesser degree in terms of non-monetary contributions to the child's household.[7] Emphasis is placed on child support collection because poor collection rates have negative implications for children and families. For millions of families, a lack

[7] The perceived punitive nature of child support enforcement has deterred out-of-wedlock families from establishing paternity and child support orders. Many fathers have remained outside the system, supporting and visiting their children in informal ways (Edin, 1994). Some research reveals that unmarried fathers who fail to make child support payments are interested in their child's welfare and make in-kind contributions, e.g., diapers, clothes, food, and baby-sitting (Cleveland, 1993).

of child support contributes to problems such as poor housing, health risks, decreased father-child contact, and increased parental stress - all of which have serious and adverse consequences for child well-being (Johnson, 1997). Another body of literature focuses on the relationship between how often a nonresident father visits and child outcomes. Visitation is usually measured by frequency of contact either in person, by phone, or by letters. Related to the concept of visitation as involvement are studies on custody arrangements.

It seems logical to assume that benefits accrue to those children whose nonresident fathers engage in their lives in positive ways. But, evidence to support this conclusion is mixed (King, 1994; Halle, 1998; Amato, 1999; Hawkins, 1991; Furstenberg, 1987). On one hand, studies of child support do show a positive correlation between payment and child outcomes (Argys et al, 1996). However, studies frequently find small and/or statistically insignificant effects of visitation. "Studies consistently find that father's payment of child support improves, not only for children's standard of living, but also for their health, educational attainment, and general sense of well-being. Overall, the social science research appears to indicate that nonresident fathers are important for their money, but for very little else (Amato, 1998)."[8] Amato and Gilbreth (1999) suggest that these results arise because most researchers define involvement narrowly in terms of financial support and/or visitation. In doing so, researchers may inadvertently fail to assess the true impact of nonresident father-child interaction. Unfortunately, better measures of nonresident father involvement are frequently difficult to construct from nationally representative data

[8] One review of the literature found that out of 32 studies of divorce and child outcomes, 15 found contact to be statistically significantly and positively associated with child well-being, seven found contact to have a statistically significant adverse impact on well-being, and 10 found no significant results at all (Amato, 1993).

(Day, Even, and Lamb, 1998). Despite this, there is a growing literature that focuses on what nonresident fathers do with or for their children. This literature often categorizes nonresident fathers' parenting style and assesses the relationship of different styles to child outcomes (Amato and Gilbreth, 1999).[9]

Table 3-1: Effect Sizes of Nonresident Father Involvement on Child Well-Being

Child Outcomes	Mean Weighted Effect Size of the Impact of Different Types of Father Involvement on Child Outcomes			
	Payment of Child Support	Frequency of Contact	Feeling Close	Authoritative Parenting Style
Academic Success	.09***	.03*	.06*	.15***
Externalizing Problems	-.08***	-.02	-.05*	-.11***
Internalizing Problems	-.01	-.03*	-.07**	-.12***

*p < .05 **p<.01 *** p<.001
Source: Amato, P. and Gilbreth, J. (1999). Nonresident Fathers and Children's Well-Being: A Meta-Analysis. Journal of Marriage and the Family 61 (August 1999): 557-573

Table 3.1 summarizes the results of a meta-analysis of 63 studies on nonresident father involvement (Amato and Gilbreth, 1999). The authors report effect sizes, measured as partial correlation coefficients, associated with the impact of payment of child support, frequency of contact, father-child closeness, and parenting style on

[9] Psychologists often distinguish among three types of parenting styles (Baumrind, 1968) *Authoritarian* parenting is characterized by high levels of parental demands, supervision, and discipline and a relative absense of parental warmth and supportiveness. *Permissive* parenting is characterized by warmth and tolerance for a child's impulses and a relative absence of demands regarding child behavior. *Authoritative* parenting is characterized by some freedom within moderate limits. Parents retain control while simultaneously encouraging the child to achieve personal autonomy and respect and responsibility for self and others (Darling, 1999; Reaves, 1995; Dieu, 1999). Research indicates that authoritative parenting is positively correlated with child outcomes such as social competence, academic achievement, psychosocial development, and low levels of problem behavior. Children from authoritarian homes tend to achieve modest academic success and have low incidence of behavior problems, but have poor social skills, low self-esteem, and higher levels of depression. Children from permissive environments perform poorly on all outcomes (Darling, 1999; Reaves, 1995; Dieu, 1999). When noncustodial parents visit with their children, the activities they engage in fall largely into the category of permissive parenting engaging in "…largely social and recreational activities with their children as opposed to participating in their child's day-to-day routine, such as helping with homework. In addition, nonresident fathers have been accused by custodial mothers of buying the children with money and gifts, taking too little responsibility for child rearing, being permissive as parents, and failing to properly discipline the children during visits." (Stewart, 1999: 539-540).

three categories of child outcomes (academic success, behavior problems, and mental health problems). It shows that father's payment of child support is positively associated with children's academic outcomes (grades, test scores) and negatively associated with behavior problems such as aggression and delinquency. Child support payment is not statistically significantly associated with reduction in internalizing problems such as depression and low self-esteem. It also confirms that frequency of contact is very weakly but positively correlated with child well-being. Feelings of closeness between child and father are positively associated with good school outcomes and fewer behavior and mental health problems. The magnitude of these associatons matches or exceeds those associated with frequency of contact or payment of child support.

Interpretation of these study results is not straightforward. First, the authors used a combination of zero-order correlations and partial correlations to compute the effect sizes in the analysis. The control variables that are removed from the correlation to create partial correlations varied from study to study. Generally, however, they are demographic characteristics such as parental education, race, and age. However, none of the studies in the meta-analysis controlled for other dimensions of father involvement, such as parenting style. As such, the best interpretation of the effect size (when based on partial r) is the total effect of paternal involvement net of only demographic characteristics. This means that the reported effect sizes of parenting style do not take into account the simultaneous effects of father-child closeness, visitation, or child support. The same holds true for the other effect sizes. To the extent that the four father involvement factors analyzed make positive contributions to child outcomes, on

average, the failure to control of other types of involvement means that the effect sizes reported by Amato and Gilbreth may be biased.

Second, while this meta-analysis does summarize, quite nicely, what is known about nonresident father involvement and child outcomes, there are methodological issues associated with the included studies that affect the way results can and should be interpreted. In fact, what we know about the impact of nonresident father involvement may well be biased.

WHY MIGHT WHAT WE KNOW BE BIASED OR VARY WITH THE REPORTING PARTY?

Bias refers to the systematic tendency to over- or underestimate a population parameter due to problems of survey implementation and statistical modeling. In the context of evaluating the impact of nonresident father involvement on child well-being, bias refers to the systematic misrepresentation of father behavior and/or the impact of that behavior on child outcomes. Using the classification scheme proposed by Groves (1989), bias can arise in a number of ways: coverage error, nonresponse error, respondent error, instrument error, omission of key explanatory variables, and interviewer error. Because the focus of this research is large-scale, nationally representative surveys, the assumption is made that interviewer errors have been minimized through training. As such, interviewer error is not addressed here. While the omission of key explanatory variables is important for this body of research, it is outside the scope of the issues addressed by this study and therefore not discussed in detail.[10] Instead, this review of the

[10] The basic question which underlies much research on nonresident fathers is whether "responsible fathering" activities (such as child support payment or visitation) consciously undertaken by the father cause a change in the child outcomes of interest. The problem is to establish what would have happened in the absence of father involvement,

literature focuses on how coverage error, nonresponse error, respondent error, and instrument error relate to the use of mothers as proxy reporters for nonresident fathers and bias in parameter estimates.

Coverage Error

Coverage error occurs when some subset of the population of interest is omitted from the sampling frame being used to generate a representative sample (Groves, 1989). To the extent that the omitted individuals are systematically different from the population, sample data will not be fully generalizable to the entire population of interest and estimates produced with the sample data will be biased.

With respect to research on nonresident fathers coverage error generally occurs when institutionalized fathers, absent fathers in the military, and minority nonresident fathers are omitted from the sample frame. Coverage error also occurs if researchers rely on mother-provided information and/or court records to identify and locate these men. If mothers refuse or are unable to provide this information, nonresident fathers will be omitted from the sampling frame. If excluded men systematically differ from those included in the frame, their omission will cause coverage error. Excluding certain types of fathers may artificially truncate variation in father involvement, making statistically significant effects of involvement hard to detect. It also attenuates correlations, making associations between variables

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or the counterfactual. Because father involvement is not randomly assigned to children, and because nonresident fathers who are involved with their children systematically differ from those who are not in ways that cannot always be controlled for, the proper counterfactual cannot be established. As a result, a cause-and-effect relationship between nonresident father involvement and child well-being cannot be asserted. There may be unobserved characteristics related to father involvement or child well-being that explain which fathers are involved with their children and which are not. Failure to control for these unobserved characteristics will cause research results to be biased. While this study does not explicitly address the problems associated with omission of key characteristics, they should be kept in mind when interpreting the results of research in this area.

appear smaller than they really are. Thus, coverage error is consistent with the presence of small, statistically insignificant effects of nonresident father involvement.

An alternative to identifying fathers through mothers' reports would be to identify nonresident father families through the fathers' reports. Depending on how the target population is defined, this could result in a different type of coverage error because large-scale national surveys include only noninstitutionalized persons. As such, to the extent that nonresident fathers are not randomly distributed among the institutionalized population, failure to include them in the sample frame will cause coverage error. Sorensen (1997) estimates that 42 percent of institutionalized men are nonresident fathers. Were one to use father-reports for analysis, or paired data matched through fathers' reports, families associated with institutionalized men would not be observed in the sample. This would contribute to censoring of the dependent variable (child well-being), thus causing bias.

Measuring and adjusting for coverage error requires information about those omitted from the sample frame. Limited information is available on those nonresident fathers omitted from the PSID CDS sample frame. Using this information, the adjustments made to the sampling weights to compensate for nonresponse described in the next chapter partially compensate for the coverage error. This is possible because the new weights are generated using the predicted probabilities of nonresident fathers responding to the PSID CDS survey. Because "responding" means that an absent father was included in the sampling frame, the new weights adjust for the coverage error by taking account of this probability. The adjusted weights will help reduce bias in

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It should be noted, however, that omitting variables biases regression coefficients.

estimates of means and proportions, as well as estimates of regression coefficients.

Nonresponse Error

Nonresponse error occurs if, among those in the sampling frame, those who respond to a survey are systematically different than those who do not. For example, it may be the case that the nonresident fathers who respond to surveys are those who are more likely to be involved with their children than not. These systematic differences bias sample statistics. The magnitude of the bias is a function of the size of the nonrespondent group and the extent of the difference between the responding and nonresponding groups.

There are two types of nonresponse, both of which can occur for a number of reasons. Failure to collect any information from those in the sampling frame is referred to as "unit nonresponse," whereas failure to gather information on individual survey items is referred to as "item nonresponse." In the case of unit nonresponse, individuals may not be able to be reached for a survey. If they are contacted, individuals may choose not to respond or may be unable to do so. In the case of item nonresponse, individuals choose not to answer specific questions because they are unwilling or unable to do so. While some nonresident fathers may be unable to respond to the survey because they cannot be located or contacted, there may also be a large number who refuse to respond for fear that it may obligate them in some way to the mother/child and/or the courts/child support agency. Both types of nonresponse introduce bias into the estimation of population parameters if nonrespondents systematically differ from respondents in a manner correlated to variables of interest.

Instrument and interviewer errors can contribute to item nonresponse, especially for families with complicated relationships - such as those under consideration here. For example, item nonresponse is likely to be more common if children spend time in each parent's home during the reference period, or if the children live with the respondent at the interview date, but lived with the other parent during the reference period. In these cases item nonresponse may occur because the respondent does not know how the question applies to his or her particular situation, or because the question's response categories do not fully capture the appropriate response for a particular family situation.

In the PSID CDS unit nonresponse is a far greater challenge than item nonresponse. Unaddressed, unit nonresponse is likely to introduce bias into the estimation of means, proportions, and regression coefficients used to evaluate the relationships between nonresident fathers, their involvement with their children, and their children's outcomes. Adjustments for nonresponse made in this research are largely restricted to unit nonresponse, and are described in the next chapter.

Response Error

A final type of error that may bias the literature on nonresident father involvement, and the primary focus of this research, is response error.[11] The vast majority of the research reviewed relies on mother-reported data to describe nonresident father involvement. Implicit is the assumption that as a child's primary caregiver, the mother is familiar with the child's activities and relationships with the

noncustodial parent. If this assumption is incorrect, the information that mothers provide about the nonresident father-child relationship will be inaccurate. To the extent that mothers systematically over- or underreport certain types of nonresident father behaviors, estimates of the impact of nonresident father involvement on child well-being will be biased. The degree and direction of such bias is likely to vary with child, parent, and family characteristics.[12]

At this point it is important to distinguish between response error and response discrepancy. Response error occurs when a respondent provides an answer that deviates from an objectively assessed truth. For example, if a mother indicates that a nonresident father is 40 years old when he is 45, this is a response error. By contrast, response discrepancy occurs when two respondents provide different answers about something that cannot be objectively assessed. If a mother indicates that a child feels "somewhat close" to the father and the father indicates the child feels visits "quite close," this is an example of a response discrepancy. Either can introduce bias in estimates to the extent that all possible surveys using the same design would over/underestimate the true population parameter (Groves, 1989).

There are a number of reasons why use of mother-reported data as a proxy for father-reported data might produce biased estimates of the level and quality of father involvement. Although little attention has been given to differences between mothers' and fathers' reports as they relate to nonresident father involvement with children, some studies in

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[11] Instrument error can contribute to both item nonresponse, as well as response error. As such, the discussion of instrument error is not dealt with separately.

12 This is a case of measurement error, and does not necessarily imply purposeful erroneous response on the part of the mother. In the case of measurement error, regression coefficients will underestimate the true relationship between an independent and dependent variable.

related domains have examined spousal consensus both within marriage and after divorce (Ahrons, 1979; Ahrons, 1980; Ahrons, 1981; Ahrons, 1983; Ahrons, 1987; Davis, 1970; Douglas, 1978; Granbois, 1970; Scanzoni, 1965).[13] Some of these authors have attributed differences between reports to random error, problems associated with research instruments, and problems associated with self-reporting (Davis, 1970; Douglas, 1978; Granbois, 1970; Scanzoni, 1965).

In addition to these possibilities, it also seems likely that 1) mothers might not know the extent of, or details about, nonresident fathers' characteristics and involvement with their children, 2) real differences exist between men and women's perceptions and experiences of their parenting (Bernard, 1972; Weiss, 1975; Hill, 1976; Ahrons, 1981), 3) a poor interparental relationship may inhibit accurate recall of information when reporting about an absent parent and 4) response errors may occur as the processes affiliated with certain paternal behaviors become increasing complex (Schaeffer, Seltzer, Dykema, 1998). These potential contributors to response error and response discrepancies are discussed below.

Differences in reports are attributable to random error.

There are two types of errors in reports that researchers care about. The first type (and of least concern) is random error, colloquially referred to as "noise," which adds variability to the data but does not affect estimates of means. Random error can be reduced (and precision increased) through well-designed survey instruments. If

13 Studies regarding the accuracy of proxy reports in fertility decisions suggest that the reliability of these reports is uncertain, but that attention should be paid to controlling for random measurement error and to collecting data from both men and women. See R. Williams and E. Thomson, "Can Spouses Be Trusted? A Look at Husband/Wife Proxy

poorly designed survey instruments introduce only random error the result is not a bias in sample statistics, but a reduction in the power to detect statistically significant differences. The second type of error is systematic. Systematic error, which does introduce bias, is caused by factors that systematically affect measurement of the variable across the sample. One study found that husbands' proxy reports of their wives fertility desires included systematic error while wives' proxy reports of husbands' desires suffered only more random error than data provided by both spouses (Williams and Thomson, 1985). These results suggest that, if choosing between proxy reporters of a couple's fertility decisions, it would better to choose the wife.

Differences in reports are attributable to poorly designed survey instruments.

As indicated, poorly designed survey instruments that only increase random error make detection of statistically significant relationships difficult but do not introduce bias. However, poorly designed survey instruments that introduce bias or causes parameter estimates to vary significantly with the reporting party are of particular concern. Such problems can be introduced through a number of factors including poorly worded questions and use of inappropriate response categories.

While it seems logical that survey questions should mean the same thing to all respondents, this is not always that case. For example, the PSID CDS asks mothers: "How many days did the child stay with his or her father during the past 12 months?" Some mothers may assume "stay" means "stay overnight," while others may assume it means "stay

Reports." Demography, 22:115-123, 1985. and L. Williams, "Determinants of Couple Agreement

for visit." Both parents are asked "How much influence does [the child's father] have in making decisions about such things as education, religion, and health care?" The term "influence" may mean decision-making power for some and input into decisions for others. The term may mean different things to mothers and to nonresident fathers. Moreover, even if the child's father has decision-making power regarding education, he may have no role in religious or health care decisions. How mothers and fathers weight these various roles when answering "none, some, a great deal, or do not know" may vary. In short, the question may be unclear. There is evidence that unclear questions produce biased estimates (Fowler, 1992).

Determining and correcting for bias introduced by poorly worded questions is difficult if the questions require subjective assessments where there is no right or wrong answer. Evaluating a nonresident father's "influence" is subjective. As such, different distributions in mothers' and/or fathers' answers to the same question does not necessarily mean there is error. However, if there is an objectively correct answer (ie: how many days the child spent with the father in the previous 12 months), a question's ambiguities can produce bias. Although some ambiguities may be clarified in the interview process, "...it is not acceptable to give interviewers definitions to be used only if respondents ask questions or act confused. Consistent measurement requires that all respondents be exposed to the same consistent definitions (Fowler, 1992: 229)."

The best way to evaluate the usefulness of mothers as proxy reporters for nonresident fathers is to examine discrepancies between mothers' and nonresident fathers' answers to the same questions. This

in U.S. Fertility Decisions." Family Planning Perspectives, 26(4): 169-173, 1994.

is done in Chapter 6. Unfortunately in the case of the PSID CDS, it is frequently impossible to determine the "right answer" to the questions asked of both parents. As a result, while some attention is given to response errors most analysis focuses on response discrepancies. These discrepancies are likely to arise when response categories make use of vague quantifiers that could mean different things to different people.

Vague quantifiers such as "a lot," "a little," "somewhat," etc. represent imprecise quantities and define categories of Likert scales used extensively in survey research. Studies show that the meanings of these adjectives vary for each individual and in each context in which the word is used (Mosier, 1941; Simpson, 1994; Parducci, 1968; Chase, 1969; and Pepper and Prytulak, 1974). One study found that individuals who do not engage in an activity, or have a less favorable attitude toward it, tend to use higher-level quantifiers to define the median (Helson, 1964). This implies that mothers and fathers with differing attitudes toward visitation may report the same frequency of activity using different adverbs. There is also evidence that interpretation of vague quantifiers differs by race, education, and age. Schaeffer (1991) found that phrases like "very often" refer to higher absolute frequencies for younger respondents, whites, and better educated respondents asked about their recent experiences with excitement and boredom. While Schaeffer found no evidence of sex differences with respect to excitement and boredom, such differences might exist between mothers and fathers when asked about nonresident father involvement. If there are systematic differences in the way mothers' and nonresident fathers view vague quantifiers, then using them in survey questions will introduce bias.

Differences may arise because mothers do not know the details of fathers' characteristics and/or involvement.

Mothers may not be privy to the details of a nonresident father's characteristics and involvement with his child because interactions between the mother and father are few. In cases of divorce, there is evidence that the relationship between former spouses deteriorates over time. Data from the Binuclear Family Research Project show that one year post-divorce 21 percent of former spouses report relatively high levels of coparental interaction, but two years later only 9 percent report similar levels of interaction. Moderate levels of nonparental interaction between former spouses also decreased from 25 percent to 8 percent during the same period. These patterns of interaction appear to be unrelated to respondent's age, education, length of marriage, age of the youngest child, or marital status of the former wife. There is, however, a negative relationship between a husband's remarriage and level of interaction (Ahrons, 1981). Data from the National Survey of Families and Households indicates that approximately one-quarter of separated and divorced couples, and 45 percent of never-married couples had not discussed their child at all in the preceding year (Seltzer, 1991).

There is additional evidence that mothers may not be fully aware of nonresident father behaviors. In reviewing studies on child support payment which used matched samples of mothers and fathers, Schaeffer et al (1998) found that while reports of the average amount of child support owed and paid differed little between custodial and noncustodial parents, comparisons of these reports with court records show that both tend to

overreport amounts paid.[14] Overreports of payment are larger for fathers than for mothers but reports of amounts owed are generally accurate for both parents. The authors suggest that "nonresident fathers know about money they pay to support their children that resident mothers do not know about, or that nonresident parents report paying more child support than they do, or both" (Schaeffer, Seltzer, and Dykema, 1998: 19).

Mothers and fathers may perceive parenting differently.

There is also evidence to suggest that mothers and fathers perceive parenting patterns differently.[15] Ahrons and Bowman (1981) evaluated the responses of 98 divorced couples to questions about their postdivorce relationship. They found that responses were statistically significantly different on fifty percent of the scales and variables considered. Specifically, statistically significant differences in reports were found for issues related to conflict and support, and for nonresident parent involvement. Nonresident parents (usually fathers) perceived themselves to be more engaged in parenting activities than residential parents (usually mothers) perceived them to be.

These findings are consistent with the results of another study that investigated the postdivorce relationship between former spouses (Ahrons, 1983). In 46 out of 54 couples, fathers perceived their involvement to be greater than their former spouses perceived their involvement to be. Ahrons reports, "[t]he reality of fathers' involvement with his children in

14 They review: Braver, S.L., Fitzpatrick, P., and Bay, R.C. (1991). Noncustodial parent's report of child support payments. Family Relations, 40, 180-185; Smock, P. and Manning, W. (1996). Nonresidential parents' economic ties to children: New Evidence from the Panel Study of Income Dynamics. Paper presented at the NIH Conference on Father Involvement. Sonenstein, F. and Calhoun, C.A. (1988). Survey of absent parents: Pilot Results. Unpublished manuscript, The Urban Institute, Washington, DC.

15 There is evidence that mothers' and children's perceptions of key constructs related to nonresident fathers differ. Specifically, mothers' and children's perceptions of the construct "closeness to the nonresident father" appear to differ (Smith and Morgan, 1994).

this mother custody sample was perceived differently by each of the parents, with a striking tendency for fathers to overestimate or mothers to underestimate the involvement (p. 62)."

Schaeffer et al (1998) review a number of studies that find similar discrepancies in reporting about father-child contact between noncustodial fathers and custodial mothers.[16] They, too, found that fathers reported higher levels of contact with their children than did mothers. While legitimate differences in perceptions may explain these findings, social pressure may also encourage fathers to overreport contact with their children to the extent that such reporting is perceived as socially desirable.

Cultural and social norms affect the way parents view themselves and each other, even if they cohabitate. One study of husband-wife responses to survey questions found that husbands and wives were more likely to provide the same answer to nonevaluative survey questions which required answers that could be quantified numerically, and less likely to agree on questions were answers required interpretation on the part of the respondent (Ballweg, 1969). The author notes, "…while an objective description of hard data is standardized throughout society [income, for example], a similarly "objective" report on soft data may be influenced by the positions a person hold in the social structure [father involvement, for example] … survey research designed to secure information about family behavior patterns must recognize the limitations imposed by interviews with a single family member." This is especially likely to be the case with

[16] They review: Braver, S.L., Wolchik, S.A., Sandler, I.N., Fogas, B.S., and Zvetina, D. (1991). Frequency of visitation by divorced fathers: Differences in reports by fathers and mothers. American Journal of Orthopsychiatry, 61, 448-554; Veum, J.R. (1993). The relationship between child support and visitation: Evidence from longitudinal data. Social Science Research, 22, 229-244; Tuschen, K. (1994). When parents 'live' with their

resident mothers and nonresident fathers when response categories are Likert scales that leave room for interpretation.

Poor interparental relations may interfere with parents' ability to report behaviors accurately.

The Ahrons and Bowman study (1981) also found that conflict between the parents was statistically significantly correlated with discrepant reporting. While we know from other sources that interparental conflict negatively interferes with parenting practices (Krishnakamur, 2000), it may also be the case that hostility interferes with intentions and recall when reporting about an absent parent's behaviors. Certainly, interparental conflict is known to infer with nonresident father visitation (Ahrons, 1979). In fact, Ahrons (1983) found that "[f]or mothers, the quality of the coparental communication and her anger were also associated with her perception of her former spouse's involvement with the children... mothers who were less angry were more likely to have former spouses whom they perceived as more involved with their children. It is interesting to note that fathers' anger, in contrast to mothers', had very low correlations with both mothers' and fathers' perceptions of fathers' involvement (pp. 63-65)." However, between one and three years postdivorce, fathers report an increasing amount of anger in coparental interactions, increasing amount of disagreement regarding childrearing, and decreasing support for their parenting activities by former wives (Ahrons, 1987). These results suggest that over time a custodial parent may become less and less familiar with the noncustodial parent's behavior and characteristics as the interaction between former spouses declines. Fathers' increasing anger over coparenting issues may also interfere with the frequency and

children. Unpublished senior honors thesis, Department of Sociology, University of Wisconsin-Madison.

quality of visitation with children, as well as communication about parenting activities to a former spouse - making it difficult for her to report accurately about his behavior.

Response errors increase with the complexity of the behavior being reported on.

The final explanation for why mothers and nonresident fathers' reports of fathers' behavior may differ has to do with the complexity of the behavior that the respondent mother needs to recall when responding to survey questions. In reviewing factors that affect response errors, Schaeffer et al note that "response errors increases as the phenomena being reported about becomes more complex (1998: 19)." Information processing theory suggests that response errors occur at various stages in the response formation process: encoding of the information, comprehension of the question, retrieval of the answer, judgment about the answer, and reporting (Groves, 1989). Studies that apply this theory to studying discrepancies in child support reporting show that complex payment patterns are associated with larger reporting errors than simple payment patterns (Schaeffer, 1994; Dykema, 1996). Specifically,

> "Social characteristics of respondents have little effect on reporting errors once characteristics of the pattern of actual payment are taken into account….complex payment patterns, payments of alimony, and presence of withholding due to delinquency in the life of the case are all associated with increased errors for [payers and receivers of child support]. As expected, receivers for whom the court forwards payment to social services (because the parent receives AFDC), are less accurate than other receivers; but this factor does not affect the accuracy of payers." (Schaeffer et al, 1998: 20)

These results suggest that reporting of father-child contact and paternal parenting behaviors would be more prone to error in cases where contact between the nonresident father and child is erratic and parenting behaviors

are not systematic. This is likely to be in the first few years after marital dissolution (Hetherington and Camara, 1984).

Additional theories

There are a number of other theories in social psychology relevant to the information processing in a survey context. Representativeness principles suggest that mothers will remember behavior that fits with their overall perceptions of the father (Tversky and Kahneman, 1974). There is also evidence to suggest that accuracy of information recalled improves as the length of time since the event decreases, as the salience of the event for the respondent increases, and as the respondent's motivation for accuracy increases (Groves, 1989). This suggests that mothers reporting on fathers' behavior that occurred less recently are more prone to error than those reporting on recent behaviors. At the same time it suggests that mothers reporting on behaviors that occur regularly may be more accurate than those reporting on behavior that occurs irregularly because the former may be more salient events and easier to recall. Other theories suggest that respondents tend to report information in a manner they perceive to be socially desirable (Groves, 1989). As such, nonresident fathers may overreport their engagement with their children, and mothers may do the same or the opposite - depending on their social orientation.

Finally, it may be the case that mothers are satisfactory proxy reporters for nonresident fathers. Support for this hypothesis comes from literature on the usefulness of wives' proxy reports. There is some evidence that wives are better reporters than husbands for events of which they are both aware. Auriat (1993) found that when recalling the couples' autobiographical history, women erred less often than husbands and that husbands' inaccuracy was affected by the length of time since the event,

but wives were not. Other research on the usefulness of spousal proxy reports found that, with respect to fertility desires, husbands' proxy reports included systematic error while wives' proxy reports suffered only more random error than data provided by both spouses (Williams and Thomson, 1985). If the reporting discrepancies that exist between mothers and nonresident fathers follow the same patterns as those found for husbands and wives generally, then mothers may be good proxy reporters. Of course the difference is that when acting as proxy reporters for nonresident fathers, mothers are reporting on characteristics and behaviors with which they no longer have direct involvement or regular contact. As such, it would be improper to conclude that mothers are good proxy reporters for nonresident fathers soley on the basis of the usefulness of wives' proxy reports for husbands.

SUMMARY

The potential sources of error in research on nonresident father involvement are many. First, reliance on resident caregivers to provide information about the identity and whereabouts of the nonresident father is likely to cause some fathers to be omitted from the sampling frame and thus cause coverage error. Because most existing research does not use paired data for analysis, coverage error that results from this approach is minimal. However, in the next chapter we shall see that coverage error is a substantial problem in the PSID CDS. This problem is partially addressed by creating new analytic weights.

Nonresponse error is a second source of bias in research on nonresident fathers. Low-levels of survey response preclude many researchers from collecting and/or using data collected from these men. However, in order to address the third source of bias (response error) one

must use paired data and thus confront the problem of low and nonrepresentative response rates. This is done in the following chapter. Finally, it becomes clear that using mothers as proxy respondents for nonresident fathers may be problematic. Previous research helps to frame a series of hypotheses as to why mother reports about nonresident father behavior may be inaccurate.

To assess the extent and nature of bias in research on nonresident father involvement and child well-being this study tests four research hypotheses. Chapter 6 puts forward and evaluates two research hypotheses:

1. There are discrepancies between mothers' and nonresident fathers' reports of nonresident fathers' characteristics and behaviors;
2. These discrepancies occur systematically in a manner that potentially underrepresents nonresident fathers' involvement with and on behalf of their children.

Whether or not response error and response discrepancies have implications for estimation of regression coefficients is addressed in Chapter 7. Two additional research hypotheses are evaluated:

3. Reporting discrepancies cause parameters estimates to vary depending on whose reports are used;
4. Knowledge of reporting discrepancies enhances understanding of child well-being.

Clearly, there are many potential sources of bias in research on nonresident fathers and families. The presence of such bias makes proper interpretation of study findings, such as those by Amato and Gilbreth, challenging. Moreover, response discrepancies may cause parameter estimates to vary significantly with the reporting party. If mothers consistently report lesser levels of father involvement than the nonresident fathers, and/or if nonresident fathers' characteristics or

behaviors are measured with error, it will be the case that nonresident father involvement is more strongly associated with child outcomes than has been assumed thus far.

CHAPTER 4 : ADJUSTING FOR NONRESPONSE BIAS IN THE DATA

In Chapter 2, the Survey of Program and Income Participation and 1979 National Longitudinal Survey of Labor Market Experience, Youth Cohort (NLSY) were used to develop profiles of nonresident fathers (Lerman, 1993; Bartfeld, 1998; Sorensen and Wheaton, 2000). Reweighted SIPP data are especially useful because they are father-reported data. Because nonresident fathers are likely to know their current characteristics better than their former spouses/significant others, their reports are ideal for generating a profile. However, most studies care about more than just a profile of nonresident fathers.

Most studies examine relationships between child outcomes and nonresident father involvement, meaning data on both the child and the father must be collected. Because it is more expensive and time consuming to survey mothers, children, and nonresident fathers, mothers are used as proxy reporters for fathers. To answer research questions about the usefulness of these proxy reports, paired data must be examined. Unfortunately, neither the SIPP nor the National Longitudinal Survey of Youth (NLSY) collect such paired data. The National Survey of Families and Households (NSFH) does collected paired data, but only from recently separated parents. The only nationally representative paired data with reports from both mothers and nonresident fathers (who may have or may have never resided with the mother) on the same questions come from the 1997 Child Development Supplement of the Panel Study of Income Dynamics (PSID CDS).

THE PSID CDS

The 1997 Child Development Supplement of the Panel Study of Income Dynamics (PSID CDS) is part of a leading longitudinal dataset of individuals and their families in the United States. One major use of the Panel Study of Income Dynamics (PSID) has been to examine the consequences of children's home and school experiences with later success in life (Hofferth et al, 1997). The Child Development Supplement is unique in that it is the first nationally representative sample to collect paired data from both mothers and previously married and never-married nonresident fathers.

The Panel Study of Income Dynamics has collected data on a nationally representative sample of men, women, and children since 1968. Over time the size of the sample has grown substantially from 5,000 families to 6,792 families in 1997. The PSID collects data on employment, income, wealth, housing, food expenditures, income transfers, marriage and children. However, the information about children during childhood is limited to age, gender, and schooling. There is no data on children's development and experiences during childhood. In order to address this gap, the Panel Study of Income Dynamics (PSID) supplemented its panel data with data on 3,586 children - or 2,394 families in 1997. The Child Development Supplement (CDS) includes assessments of children's cognitive, behavioral, and health outcomes obtained from the child, the mother or other primary caregiver, a second caregiver, an absent parent, a teacher, and a school administrator. Information is also collected on parental and caregiver time inputs to children, how children and adolescents spend their time; time use in preschool and elementary school; and other measures of home, school, and neighborhood resources (Hofferth et al, 1997).

To be included in the CDS, respondent families must have been included in at least one PSID interview and have a child in the family who was 12 years old or younger and a member of the PSID sample. Up to two children age twelve and younger per family were eligible for inclusion in the CDS. In 1997, the PSID reduced its core sample and added a refresher sample of immigrants so that the data would be representative of the current U.S. population. The PSID core sample, the new PSID immigrant refresher sample, and a group of African-American families with children under age 13 in 1997 not included in the 1997 PSID Core were used to create the CDS sampling frame of 2,705 households. Ultimately, 2,380 households with a total of 3,563 children responded to the survey (Hofferth et al, 1997).

A face-to-face interview was conducted with up to two children between 3 and 12 years old and with the primary caregiver living in their household. If more than two children were eligible to participate, two were selected using a random procedure. The child interviews were conducted first. Next, data on those children were collected from other sources, such as the primary caregiver (Hofferth et al, 1997).

The Primary Caregiver is the main respondent in the CDS and is usually the child's mother. If the mother was not living with the child, the primary caregiver could be the father, legal guardian or person who knew most about the child's activities. The primary caregiver was interviewed separately about one or two children. S/he then completed separate self-administered questionnaire and time diary for each child (Hofferth et al, 1997). If there was another adult in the household who was identified as helping to raise the child, such as the child's father or mother's spouse/partner, that person completed a self-

administered questionnaire. The child was determined to reside with the primary caregiver at the time of the PSID core interview.

If the child's biological father was not living in the household, the interviewer requested the name and phone number of the father from the primary caregiver, usually the mother. This information was assumed to be correct. In a substantial number of cases the mother refused to or was unable to provide information about the father (33%). In other cases the contact information provided was not correct or the father could not be reached by phone (30%).

Table 4-1: Nonresident father contact and response patterns

Reason for nonresponse		No. of child cases
Total number of child cases in the PSID CDS		**3563**
Children with absent fathers - original sample frame		**1431**
Delete	Father is deceased	-12
	Father is not really absent	-50
Children with absent fathers - adjusted sample frame		**1369**
Coverage Error	Not contacted - father is in jail	-68
	Not contacted - father is outside the country	-7
	TOTAL COVERAGE ERROR	75 cases (5%)
Children with absent fathers eligible to be surveyed		**1294**
Nonresponse Error	Primary caregiver refused to provide information on the father	-439
	Father could not be located or contacted by phone	-393
	Father refused to participate	-97
	Someone else in the father's household refused his participation	-13
	Father could not be reached for conversation	-46
	Other	-23
	TOTAL NONRESPONSE ERROR	1101 cases (74%)
Children with absent fathers who completed the interview		**283**
	OVERALL RESPONSE RATE	22% of 1294

Source: Child Development Supplement of the Panel Study of Income Dynamics, 1997 User Guide @ http://www.isr.umich.edu/src/child-development/usergd1.html

Fathers who were located were mailed introductory materials and subsequently contacted by phone. Repeated attempts to contact the absent father by phone were made throughout the field interview period. Both the "other caregiver" and the absent father completed one questionnaire about the child and one questionnaire about the household.[17] The child's teacher or childcare provider, and school administrator also completed self-administered questionnaires. A small amount of money was given to the primary caregiver, absent father, and teacher for participation in the study. The child was given a small toy (Hofferth et al, 1997).

NONRESIDENT FATHER NONRESPONSE

Nonresident fathers are a difficult population to survey. Ultimately data were collected from 22 percent of nonresident fathers. A small portion of the low response rate (75 cases) is attributable to coverage error, and 74 percent is attributable to unit nonresponse (1101 cases). In order to make valid inferences about these men, the sampling weights provided with PSID CDS are adjusted for the coverage error and nonresponse bias using logistic modeling techniques. While the PSID CDS does provide weights that correct for nonresponse in other PSID CDS supplements, such weights are not available for the Fathers Outside the Home Questionnaire. It is important to be modest about what reweighting can accomplish. Adjustments are only partial corrections since there are unobservable characteristics that cannot be controlled for by the weights. These unobservable factors influencing selection are likely to

[17] A father of two children living in the same household completed two child questionnaires and one household questionnaire. If an absent father had two children living elsewhere but in separate households, he would have completed two child questionnaires and two household questionnaires. Finally, if two children living together had two different fathers, each absent father would have a completed a child questionnaire and a household questionnaire.

be highly correlated with both the mother-father and father-child relationships.

As noted earlier, nonresponse bias occurs if those who respond to a survey are systematically different from those who do not. In the case of the PSID CDS paternal nonresponse occurred for three reasons. First, resident mothers were relied upon to identify the nonresident father. If these individuals were unwilling or unable to provide such information, the nonresident father was not contacted. This occurred for 33 percent of fathers eligible to be surveyed. It is not entirely clear why the primary caregiver refused to provide information about the father's whereabouts. According to the PSID CDS User Guide:

> "Once we reached the father, cooperation was 64%. The main stumbling blocks were obtaining information from the mothers and tracking the fathers. We are coding the reasons the primary caregiver reports for refusing to provide information on the father. These include such reasons as "he never sees the child; doesn't know where he is; doesn't know the father; does not want the father to know about the child; a child of rape," etc. We end our contact efforts at this point. Obtaining the mother's cooperation is key to locating absent fathers. The 416 (29%) children's fathers for whom we obtained some information from the primary caregiver but were not able to contact the father is a number that could be altered. We did not have the funding to track these fathers, but assume that such efforts could be successful. Finally, fathers of 68 children are in jail/prison. We had not budgeted to interview these men. They are a "captive" audience; it should be possible to interview them with additional time and funding. Permission from the prison administration is usually required. Given that the focus of the CDS interview with the absent father is his involvement with the child, absent fathers who have not been in contact with their child over the past year will provide little additional information over that provided by the mother on frequency and extent of contact. The loss of these hard-to-reach groups of men does not compromise our particular study. However, these parameters should be helpful to researchers with different purposes." (PSID CDS User Guide, Chapter 4, p. 5)

Second, if contact information provided was erroneous the father was unable to be contacted. Sometimes even in the presence of correct

information, fathers were unable to be contacted. Together these account for 32 percent of cases eligible to be surveyed. Third, if the nonresident father was successfully contacted, he may have chosen not to participate in the survey (12 percent of eligible cases). Coverage error occurred in 75 (5 percent) cases when children with absent fathers those whose fathers were in jail or lived outside the country were deleted from the sampling frame even though they are part of the population of interest. Of the 1,294 cases eligible to be surveyed, the response rate is 22 percent for children's absent fathers.

The reasons for mothers' refusal and/or inability to provide information on the nonresident father have not been made available for analysis. However, because many cases of nonresponse are attributable to the unwillingness or inability of the primary caregiver to provide information or to the use of erroneous information to find the father, once the data become available it would be worthwhile to analyze the differences between located and unlocated nonresident fathers. In one study, predicators of location were evaluated in the context of child support payment behavior of divorced fathers using data from the Wisconsin Court Record Database, Parent Survey 2 (PS2), and PS2 Calling Record (CS2) (Lin, Schaeffer, and Seltzer, 1999). Although the findings from that study have limited generalizability here because analysis did not include nonmarital fathers and faced difficulties associated with missing data, it is worth noting that the authors found that, on average:

- unlocated fathers were less financially well-off than located fathers;
- the median length of marriage is slightly longer for located than unlocated fathers (3 years);
- unlocated fathers are less likely to have shared custody arrangements;

- unlocated fathers are less likely to have a house involved in the property settlement;
- the proportion of unlocated and located fathers with child support orders and routine income withholding are similar; and
- the length of time from filing to a finalized divorced is about the same for both groups.

(Lin, Schaeffer, and Seltzer, 1999: 151)

These findings suggest that lower-income nonresident fathers with fewer ties to the mother and child who may be mobile are likely to constitute the bulk of unlocated fathers in the PSID CDS. The authors also found that contacted fathers who refuse to participate are less likely to have a child support order than those that do. They surmise that these fathers may view survey participation as an attempt to track and obtain child support from them. This suggests that that among the 7 percent of fathers in the PSID CDS who refused participation may be those who are not formally involved in the child support system.

The remaining sections of this chapter outline the methodology and results associated with adjusting for nonresident father survey nonresponse in the PSID CDS. We shall see that many characteristics of the nonrespondents in the PSID CDS are similar to those found by Lin et al (1998). In combination these characteristics tend to describe the population of men and families that public policies aim to help - and as such, correcting for nonresponse is useful.

UNIT OF ANALYSIS

To generate a dataset for analysis, data from the Primary Caregiver Child Questionnaire were merged with the demographic data file for all 3563 CDS child cases. These data were then merged with 283 observations from the Fathers Outside the Home Child Questionnaire. Next, for the purposes of recalculating the sample weight and subsequent

analysis, data were restricted to those children whose father is alive, whose father resides outside the home, and whose mother lives inside the home (n=1126). A father who resides outside the home was defined as the biological or adoptive father who is not living in the home of the target child.[18] Two observations in which the mother was not identified as the primary caregiver were also dropped from the dataset. The remaining number of observations is 1124 children, of which 251 had absent fathers who responded to the survey.[19]

ANALYZING NONRESPONSE

The first step in analyzing nonresponse bias in the PSID CDS is to evaluate how much nonresponse actually occurred among subgroups of interest. Overall, 251 (or 22%) of an eligible 1124 nonresident fathers responded to the Fathers Outside the Home survey. Table 4.2 presents the percent of nonresponse in subgroups defined by child and family characteristics. The far-right column contains the probability value of a chi-squared test of independence, in which the null hypothesis is that there is no relationship between row and column frequencies. Table 4.2 indicates statistically significant relationships between whether or not

[18] For this analysis, the universe of nonresident fathers was defined using Interviewer Checkpoint J1 from the primary caregiver, child booklet.

[19] Although 283 nonresident fathers participated in the PSID CDS, 32 of these men had children who lived in households in which the primary caregiver was not the mother. These observations were not considered in this analysis.

Table 4-2: Family, Child, and Father Characteristics Associated with Respondent and Nonrespondent Nonresident Fathers

		Result of Father Outside the Home Interview		P-value chi-squared test
		No Response (n=859)	Response (n=265)	
Household Characteristics				
Used SSI Last Year		5%	6%	0.565
Used Food Stamps in Last Year		47%	36%	0.001
Received AFDC last year		26%	13%	0.000
Received child support last year		32%	57%	0.000
Household in poverty in 1997		65%	75%	0.004
Child Characteristics				
Age	< 5 yrs	38%	45%	0.044
	6-12 yrs	62%	55%	
Sex	Male	56%	51%	0.229
Race	White	38%	61%	0.000
Head of Household Characteristics				
Sex	Female	76%	74%	0.527
Marital Status	Married	20%	21%	0.000
	Never married	37%	20%	
	Widowed	3%	0%	
	Divorced	22%	43%	
	Separated	19%	15%	
Graduated from High School		70%	85%	0.000
Father Characteristics				
Is currently married	Yes	25%	27%	0.000
	No	60%	73%	
	Don't Know	15%	0%	
Has other children	Yes	31%	18%	0.000
	No	53%	82%	
	Don't Know	16%	0%	
Had contact with child in last 12 months	Yes	66%	93%	0.000
	No	34%	7%	

Percentages should be read as "of nonresponders, percent associated with X characteristic" or "of responders, percent associated with X characteristic"

nonresident fathers responded to the survey and certain child and family characteristics. Specifically, response rates were higher if the:

- family received no government financial assistance in 1997;
- the mother received child support in 1997;
- the family was not in poverty;
- the child was white versus nonwhite;
- the head of household had some previous, formal relationship with the father (divorced, separated, or remarried);
- the head of household had a high school degree;
- the mother provided the father's current marital status;
- the mother indicated if the father had other children; and
- the mother reported the father had contact with the child in the previous year.

Lower response rates in lower-income child-households are consistent with Lin, Schaeffer, and Seltzer (1999). Unfortunately, unlike Lin et. al., comparisons between located versus unlocated fathers and contacted respondents versus contacted nonrespondents cannot be made for the PSID CDS because available data do not indicate whether a child's nonresident father was located and, if so, whether or not he was contacted.

PREDICTING PROBABILITIES OF RESPONSE

Using these child and family characteristics as a guide, a model was developed to evaluate the relationship of socioeconomic and demographic characteristics on nonresident father response.[20] A continuous measure of total family income was substituted for discrete measures of household income and poverty in Table 4.2. Whether or not the nonresident father has other children was dropped from the model because it provided nonpredictive of response in the multivariate context. Whether or not the mother knew the father's current maritial status was added to the model to capture the mother's familiarity with the father's characteristics (and possibly his whereabouts). The complete model is presented in Table 4.3. Skip patterns in the primary caregiver's survey instrument produce missing data for the measures of father-child contact if the father had not seen the child in the previous twelve months (n=56). In these cases missing values were recoded to indicate that the father had not had contact with the child in the last 12 months.

Predicated probabilities of response were generated by performing a robust logit regression of key characteristics of child households on

whether or not a nonresident father responded to the survey. If a nonresident father was contacted and did return the survey, the value of the dependent variable was coded as "1." All other cases are coded as zero. This specification of the dependent variable means that the new weights will correct for both coverage error and nonresponse. This is because the predicted probabilities of response obtained from the regression describe the joint probability of being in the sampling frame, being contacted, and responding.

Table 4-3: Results of Logit Regression

Independent Variable	Coefficient	Odds Ratio	Robust Standard Error
Child is nonwhite	-0.494*	.61	0.273
Total family income	0.005	1.01	0.004
Head of household has a high school degree	0.664**	1.94	0.274
Child is 5 years old or less	-0.435*	0.65	0.261
Natural log of distance of father's residence from child household (in miles)	-0.062**	0.94	0.025
Nonresident father is known to be married	0.195	1.22	0.254
Nonresident father marital status unknown	-1.59*	0.20	0.823
How often child talked to or received letter from father in last year^	0.241***	1.27	0.070
Father saw child in the last year	1.09**	2.98	0.412
Child is an only child in the household	0.574*	1.78	0.334
Child is the youngest child in household^^	0.414	1.51	0.274
Head of household is married^^	-0.554*	0.57	0.335
Head of household is never-married^^	-1.04**	0.35	0.337
Head of household is widowed^^	-2.30***	0.10	0.706
Head of household is separated^^	-0.575*	0.56	0.336
Head of household received SSI income last year	1.170**	3.22	0.527
Constant	-2.18**	0.11	0.744
Pseudo R^2	0.219		
N	1123		

^Scale on this variable is 1= Not at all, 2= Once/yr, 3= Several times/yr, 4= 1 to 3 times/month, 5= Once/week, 6= Several times/week.
^^Omitted category is "head of household is divorced."
* statistically significant at $p \leq 0.10$
** statistically significant at $p \leq 0.05$
*** statistically significant at $p \leq 0.01$

The regression was run using the Primary Caregiver/Child sample weight provided with the PSID CDS for use in analyses involving child-

[20] The model used to adjust for nonresponse is based on observed differences between participants and nonparticipants, as well as what is known about the types of nonresident fathers that are less likely to respond to surveys.

level data or data involving the relationship of the child with a caregiver or with family characteristics. The results of the regression indicate that fathers were *more* likely to respond to the survey as family income increased, as the education level of the head of household[21] increased, as communication with the child over the course of the preceding year increased, if the head of household was divorced, and if the child household received social security income in the previous year. Results also indicate that fathers were less likely to respond if the child was nonwhite, the child was six years or older, and if the primary caregiver of the child did not respond to particular questions about the absent father in the primary caregiver survey. The output of the logistic regression is listed in Table 4.3.[22]

A summary of the predicted probabilities from the logistic regression indicates a predicted response rate of 22 percent, which is consistent with the response rate described previously. New sampling weights were developed by first assigning a weight to each observation that equaled the reciprocal of the predicted probabilities of response for each nonresident father. The inverse probability weights were then standardized by dividing by the mean response probability for the nonresident fathers that did respond to the survey (mean = 4.92). Next, in order to generate the appropriate sampling weight for child households with respondent nonresident fathers, the PSID CDS Primary Caregiver/Child sample weight was multiplied by the standardized inverse probability weight just created.[23] This procedure gives the joint

[21] In some cases the mother is the head of household. In other cases the mother may have remarried or have a cohabitating partner. Research indicates that individuals tend to marry others of similar age, race, and educational attainment.

[22] The regression equation produces the predicted log odds of a nonresident father responding to the survey. The odds in column four are estimated as e^{β}.

[23] According to documentation provided with the CDS data, "The PSID analysis weights constructed for the Child Development Supplement are the product of three factors: 1) a

probability of being sampled for the PSID CDS and responding to the Father Outside the Home Questionnaire. These weights were then standardized by dividing by the mean response-sampling probability for the nonresidents father that did respond to the survey (mean = 8.93).

Table 4-4: Steps to creating new nonresident father non-response adjusted sample weights

STEP	DESCRIPTION
STEP 1: Probability weight (PW)	PW = Predicted probability of response from logit model
STEP 2: Inverse probability weight (IPW)	IPW = 1/PW
STEP 3: Standardized inverse probability weight (SIPW)	SIPW = IPW/(mean IPW for respondent fathers)
STEP 4: Child-level appropriate weight (CLW)	CLW = (PSID CDS child weight)*(SIPW)
STEP 5: Standardized final weight (FINAL)	FINAL = CLW/(mean CLW for respondent fathers)

If the modeling predicting nonresident father response is correct, these new weights are the appropriate weights to use when analyzing respondent nonresident father data from the PSID CDS.

The variance of the new weights for respondent nonresident fathers equals 1.33, indicating a design effect of 2.33 (DEFF = 1 + variance of sample weights). The design effect indicates how much the variance of the respondent sample has been inflated by the use of the new weights. In this case a design effect of 2.33 means that the calculated standard error of estimates will be 2.3 as large as they would be with a simple random sample of 251 observations. Subsequent analysis using these probability weights will require multiplying the standard error of estimates by 1.53, or the square root of the design effect, in order to determine statistical significance. The design effect also reduces the

family selection weight which is the inverse of the family's probability of selection; 2) a post-stratification factor which adjusts the sample family totals to the 1997 CPS estimated totals for forty-eight demographic/geographic cells; and 3) a within family selection weight which is the inverse of the probability of selection of the child from the set of children age 0-12 in the family."

effective sample size, in this case to a respondent sample of approximately 108 (251/2.33). The software used in this analysis makes the corrections for the design effect. In short, by correcting the bias introduced by nonresident father nonresponse, we trade precision for generalizability. Table 4-5 presents the average adjusted weights for different subgroups.

Table 4-5: Average Analytic Weights Used For Analysis for Child Households with Respondent Nonresident Fathers

(1)	CDS Sample Weight (2)	New Weight (3)
Child is nonwhite	0.648	0.826
Child is 5-12 years old	0.998	1.001
Household is in poverty	0.871	1.110
Mother received child support in 1997	1.072	0.933
Mother has never been married	0.695	1.117
Father has not contacted the child in the last year	0.993	3.142
Father had children other than the respondent child	0.880	1.039

* Both weights have been scaled so that the mean weight equals one.

DO THE WEIGHTS MATTER?

The purpose of the new weights is to adjust for the nonresponse bias introduced into the sample of nonresident fathers by the low response rate of this group to the Fathers Outside the Home Questionnaire. New weights were created to make information collected from respondent households more representative of nonresident father households overall. Thus, the new weights will be used to analyze child- and/or household-level data collected by or about nonresident fathers. If the new weights do correct for some of the nonresponse bias in the sample, estimates of different population parameters should differ when the weights are used from when they are not.

Table 4.6 lists three different estimates of the mean for various child outcomes, family characteristics, and father characteristics. Column two lists the means and proportions for these variables generated

without using weights at all. Column three lists the means and proportions for the variables using only the sampling weight provided in the PSID CDS, with the standard deviations of these estimates in column five. Column four lists the means and proportions using the new nonresponse adjusted weight generated. Finally, column six indicates the percentage bias eliminated by the new nonresponse adjusted weights. The bias eliminated is reported in percent of a standard deviation.

Table 4-6: Impact of New Weights on Parameter Estimation Parameters

(1)	No Weight (2)	CDS Sample Weight (3)	New Weight (4)	s.d. w/CDS weight (5)	Discrepancy in s.d.'s[24] (6)
CHILD CHARACTERISTICS					
Child is nonwhite	61.0%	39.5%	50.4%	0.49	22.3%
Child is over 5 years old	40.2%	40.2%	40.3%	0.49	0.2%
Child is female	50.6%	48.6%	49.0%	0.50	0.8%
CHILD OUTCOMES*					
Letter-Word Identification (3-12 yrs)	99.6	101.9	98.2	19.86	19%
Passage Comprehension (6-12 yrs)	100.3	101.4	97.7	16.27	23%
Calculation (6-12 yrs)	95.1	98.8	93.2	19.18	29%
Applied Problems (6-12 yrs)	99.6	103.2	99.5	19.53	19%
Broad Math Summation Score	98.2	102.9	96.2	20.33	33%
WISC - Rev (Digit Span)	10.5	10.3	10.3	5.04	0%
FAMILY CHARACTERISTICS					
Family Income	$27,406	$31,022	$26,596	$28,379	16%
Is family in poverty (1= yes)	29%	25%	33%	2.97%	17%
Head of household received child support last year	40%	45%	35%	3.01%	21%
FATHER INVOLVEMENT					
Mean miles father lives from child	57	54	53	126.53	1%
How often child talked on phone or got letter from father in last year^	4.7	4.7	3.7	1.48	65%
Child saw father in the last year	93%	93%	77%	0.26	63%
How often child saw father in last yr^	4.7	4.7	4.5	1.48	10%
Mean days child stayed w/father last year	38	38	34.3	47.42	8%
Father pays child's medical insurance	34%	38%	32%	0.49	12%

*With the exception of the WISC Digit Span, these indicators are norm-referenced tests with mean=100 and s.d. = 15.
^ 1= Not at all, 2= Once/yr, 3= Several times/yr, 4= 1 to 3 times/month, 5= Once/week, 6= Several times/week.

[24] The formula used here is: absolute value of (CDS Sample Weight Estimate - New Weight Estimate)/S.D. w/CDS Sample Weight

There are two patterns in table 4-6: adjustments associated with the original PSID CDS weights and adjustments associated with the new nonresponse-corrected weights. The original PSID CDS sampling weights used with child-level data adjust for family selection probabilities, within-family child selection probabilities, and child-level nonresponse. Compared to unweighted estimates, child outcomes seem to improve when the PSID CDS sample weights are used. Similarly, income levels go up, poverty levels go down, and child support collected goes up. This happens because the PSID CDS sample weights adjust for the oversample of African Americans. When nonresident father response rates are taken into account, child outcomes and family characteristics appear more similar to the unweighted estimates. This is because nonrespondent nonresident fathers tend to be associated with lower-income nonwhite families. Thus, some of the child households that are deemphasized by the PSID CDS sample weights are reintroduced by the new analytic weights.

Clearly, the estimates of the means and proportions differ between most columns. The differences in estimates of the mean for child outcomes are not large across columns, but differences do exist. Comparing columns three and four we see use of the original sampling weights would have systematically overstated child outcomes. Specifically, the means on these cognitive well-being indicators are overestimated by approximately 20% to 30% of a standard deviation.

The presence of bias is also evident with respect to child and family characteristics. Use of the sampling weight provided in the PSID CDS would have substantially underestimated nonwhite children and overestimated the mean income of families with nonresident fathers (by

approximately 14%, or 16% of a standard deviation). Not surprisingly, use of the PSID CDS sampling weight would have underestimated whether or not a family was in poverty (by approximately 25%, or 17% of a standard deviation) and one would have overestimated the proportion of families receiving child support (by approximately 29%, or 21% of a standard deviation).

How does use of the nonresponse-adjusted weight affect estimation of father involvement statistics? Adjusting the sample weights shows that previous estimates of means and proportions were biased. Use of the new weight indicates that some measures of involvement and influence were overestimated by up to 65 percent of a standard deviation when the original sample weight was used (by approximately 10%). Specifically, using the recommended sample weight would have overestimated how often the child communicates with the father annually, how often the child has seen the father in the last year, and the number of days that the child stayed with the father. Without the adjustment, one would have also overestimated the proportion of fathers who pay their children's medical expenses.

LIMITATIONS OF ANALYSIS

While the use of sample weights is standard procedure to adjust for nonresponse, the effectiveness of this approach is limited in three ways. First, predicted probabilities of response are conditioned on measurements of observed characteristics. Unobserved nonresident father characteristics that may affect coverage error (i.e. duration at a specific residence) or nonresponse error (i.e. fear of incarcaration) have not been addressed. There could also be unobserved characteristics of the mother that affect coverage error and nonresponse (i.e. fear of

being located/contact by father). The obvious lack of ability to condition on either type of unobserved characteristics is only problematic if they are correlated with outcomes of interest. In this case, the mother's fear of the father is likely to be connected with some of the child outcomes being studied. The greater the association, the more problematic the inability to condition on this variable. Second, while the 22% response rate is calculated after deceased, incarcerated, and fathers living outside the U.S. have been excluded, the possibility exists that some unlocated fathers fit these descriptions because mothers were unaware of their current status. Finally, this analysis is predicated on interviews with the primary caregiver of the child. If the primary caregiver was a nonrespondent, the absent father could not be in the sampling frame although he is in the target population. Thus, the predicted probability of father's participation is conditional on having identified and interviewed the child's mother. Assuming the original PSID CDS analytic weights properly adjust for primary caregiver nonresponse, this is not a problem.

SUMMARY

As Chapter 2 indicates, adjusting sample weights to improve the generalizability of data on nonresident fathers is not new (Sorensen, 1997; Garfinkel et al, 1998; Sorensen and Wheaton, 2000). As was the case in Sorensen's analysis of SIPP data and Garfinkel's analysis of NSFH data, using an adjusted weight has an important impact on estimation. Use of the unadjusted PSID CDS sample weight would have consistently overestimated child well-being, family income, and father involvement. Unlike the adjustments in previous studies, alteration of the PSID CDS analytic weights corrects for both coverage error and

nonresponse. The outcomes in Table 4.5 show that such a correction is necessary in order to properly estimate parameters associated with nonresident father families, and nonresident father involvement with their children.

CHAPTER 5 : THE SAMPLE

What are the characteristics of nonresident father households in the PSID CDS? This chapter describes the child, household, and nonresident father characteristics of the families in this sample using the new analytic weights generated in Chapter 4. Characteristics are presented for two categories of child households: those with a head of household and a wife/partner, and those without. The reason for this presentation is that current public policies associated with nonresident fathers tend to focus on never-married, separated, or divorced mothers and their children. Underlying these policies is the assumption that an unmarried mother has limited economic and social supports, while (re)married mothers have more resources at their disposal. By presenting summary data for both types of households, we are able to explore the possibility that these households are different.[25]

HOUSEHOLD CHARACTERISTICS

Table 5.1 shows that head/partner households constitute 22 percent of the sample, whereas "other" household types constitute the vast majority of the sample - 78 percent. This breakdown is similar to the national profile children with a parent living elsewhere. Nationally, approximately 21 percent of children with nonresident fathers live with one parent and a stepparent, 72 percent live with a single parent, and seven percent live in other arrangements (Sorensen and Zibman, 2000). The former are generally married couples headed by men who are

[25] While it would be ideal to evaluate whether or not these households are statistically significantly different from each other, there is insufficient sample size in the subgroups to detect such differences - even if they exist. As such, the differences between the two groups are not tested. However, many of the differences suggested by the data are consistent with what we know about nonresident father families from other studies.

stepfathers to the respondent child. However, some of these households are composed of the child's grandparents (34 percent). "Head and partner" households tend to have a larger number of household members, but equal numbers of minor children. On average, these households appear to have higher total incomes. This is not surprising since both the husband and wife work in 45 percent of these households. In cases where the husband works and the wife "keeps house" the median family income is $22,800 - much more comparable to "Other" households in which the head of household works ($21,000).

Table 5-1: Household Characteristics in the Sample of Families with a Respondent Nonresident Father

Characteristic		Family Unit Type		
		Head of household and wife/partner	**Other**	**Overall**
Type of Family Unit		21.50%	78.50%	100%
Mean Number of Children Under 18		2.4	2.4	2.4
Mean Total Family Income		$43,504	$21,980	$26,596
Mean Age of Head of Household		44	35	37
Head of Household is Male		100%	2%	77%
Head of Household's Marital Status				
	Married	87%	0%	19%
	Never-married	9%	40%	33%
	Divorced	0%	22%	17%
	Separated	3%	34%	27%
	Widowed	0%	5%	4%
Relationship of child to head of household				
	Son/Daughter	7%	91%	73%
	Stepson/Stepdaughter	42%	1%	9%
	Son/Daughter of wife	11%	0%	2%
	Grandson/daughter	34%	7%	13%
	Other	7%	1%	3%
Head of Household's employment status				
	Working	77%	72%	73%
	Unemployed	2%	9%	7%
	Retired	19%	1%	5%
	Keeping house	0%	10%	8%
	Other	2%	8%	7%
Household is in poverty		19%	36%	32%
Household received food stamps last year		46%	48%	47%
Mother received child support in 1997		58%	48%	50%
		n=54	n=194	n=251

"Other" households are headed by single mothers who have never been married, are divorced, or are separated.[26] These women tend to be younger than their counterpart male heads-of-household in married families. Children of absent fathers who live with grandparents appear more likely to be found in the "head and partner" households (34%) as compared to single parent households (7%).

A slightly higher proportion of heads of household work in "head and partner" households (77%) as compared to "other" (72%). Among those that do not work, "retired" is the primary explanation among "head and partner" households whereas "keeping house" and "unemployed" are the dominate reasons among the single-mother households. As such, it is not surprising that single-mother families appear more likely to be in poverty. These families experience poverty at a rate that exceeds the national rate of 19.2 percent for families with minor children in 1997, but is less than the rate of 49 percent experienced by families with children under 18 with a female head of household with and no spouse present (CDC, 1998). Despite discrepancies in poverty rates, a similar percentage of both types of household receive food stamps.

Consistent with what is known from other research, fewer single mothers in this sample receive child support than (re)married mothers. Because single mothers in the sample also tend to be nonwhite, findings regarding child support are also consistent with research that shows support receipt also differs by race. White divorced or separated women receive child support in the years after marital dissolution at a significantly higher rate (60%) than black divorced or separated women (40%). This appears to be the case for child born within and outside of

[26] Four of these women are widowed, but it is not the father of the respondent child who

marriage (Argys, 1996). Overall, the percentage receiving child support in PSID CDS sample (50%) is slightly higher but similar to other estimates of how many custodial mothers receive support. Forty-seven percent of custodial mothers in the NSFH and 46 percent of those in the SIPP indicate that they receive child support (Sorensen, 1997). The slightly higher rates of receipt in the PSID CDS are consistent with child support enforcement reforms put in place between 1993 and 1997.

CHILD CHARACTERISTICS

Table 5.2 describes the characteristics of the children in the sample of families with respondent nonresident fathers. The table shows that children in "head and partner" households are younger than children in predominately single-mother "other" households. Children in "head and partner" households tend to be female and white, whereas children in single-mother households tend to be male and nonwhite.[27] Overall, children in the sample are evenly distributed between males and females, and were approximately 7 years old at the time of the interview.

The fact that the PSID CDS analytic sample is largely nonwhite may explain the fact that more children in this sample were born out-of-wedlock (43%) than children who do not live with their fathers nationally (38%) (U.S. Census Bureau, 1998).[28] Among non-Hispanic white mothers, the rate of out-of-wedlock childbearing was 18 percent between

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died. In two of the four cases, the head of household is the child's grandparent.

[27] While one would expect males and females to be equally distributed between household types, it may be the case that mothers with young daughters find it easier to (re)marry than mothers with older sons. Prospective husbands may find the prospect of caring for another man's son more problematic than a daughter.

[28] These figures are not exactly comparable, but instead given a rough basis for comparing the PSID CDS to other national estimates. The PSID CDS captures child-households where the child is at or under 12 years old. The PSID also identifies whether or not a child was born out-of-wedlock. The Census Bureau estimate is derived from CPS data on the percent of children under 18 living with their mother only and whose mothers were never married.

1990 and 1994, as compared to 72 percent among African American and 32 percent among Hispanics (Bumpass and Lu, 2000). The subsample of children who live in a "head and partner" household, who also tend to be white, experience fewer out-of-wedlock births than those who live with single-parents, and tend to be nonwhite.

Table 5-2: Child Characteristics in the Sample of Families with a Respondent Nonresident Father

Characteristic	Family Unit Type		
	Head of household & wife/partner	Other	Overall
Mean child's age at time of core interview	5.7 years	7.0 years	6.8 years
Child is nonwhite	40%	53%	50%
Child is female	58%	47%	49%
Child was born out-of-wedlock	30%	46%	43%
Child Health at Birth			
Child born before due date	28%	42%	39%
Mean child weight at birth	7.1 lbs	6.9 lbs	6.9 lbs
Medicaid paid for medical bills at birth	19%	47%	41%
Primary caregiver received __ during pregnancy			
WIC	59%	58%	58%
Food stamps	17%	31%	28%
ADC/AFDC	4%	27%	22%
Current Child Health			
Doctor/health care professional said child has…			
Asthma	5%	12%	11%
More than 3 ear infections/year	55%	32%	34%
Speech impairment	18%	8%	10%
Anemia	0%	8%	6%
Developmental delay	2%	8%	7%
Learning disability	12%	9%	9%
Hyperactivity/ADD/ADHD	2%	7%	6%
Mean times child has seen a health care professional for illness in the last year	1.5 times	1.1 times	1.21 times
Child has seen mental health professional	7%	18%	16%
Child is currently covered by health insurance	84%	88%	87%
This insurance is Medicaid	16%	38%	34%
	n=54	n=197	n=251

How do child characteristics differ by household type? While the average child weight at birth is the same for both household types, single-mother households experience a higher rate of premature births. Receipt of public assistance during pregnancy is also higher in single-

mother households. While almost all children in the sample are covered by health insurance, this insurance coverage is Medicaid in 37 percent of single-mother households versus 24 percent of "head and partner" households. The higher rate of Medicaid coverage may explain why children in the former households have seen a doctor for illness fewer times in the previous year than children in "head and partner" households. Findings regarding public assistance use are consistent with description of total family income provided by Table 5.1.

Children in "head and partner" households experience higher incidence of ear infections, speech impairments, and learning disabilities than those in "other" households. By contrast children in single-mother households experience higher rates of asthma, anemia, hyperactivity, and visits to mental health professionals. Their incidence of asthma (12 percent) is higher than the national average for children under the age of 18 (7.5 percent in 1995)(CDC, 1995).

While the overall health of the children in the sample does not appear to be particularly poor, the percentage of children in the sample born before their due date is more than three time the national incidence of preterm births (11.4 percent in 1997) (CDC, 2000).[29] Incidence of Medicaid coverage in this sample is also higher than the national average. In 1997, 18.4 percent of children under the age of 18 were covered by Medicaid insurance, with the coverage rate being higher for children under 6 (24.7 percent) than for those between 6 and 17 years old (15.2 percent) (CDC, 1998).

[29] Preterm refers to births of less than 37 weeks of completed gestation.

NONRESIDENT FATHER CHARACTERISTICS

Table 5-3: Nonresident Father Characteristics

		PSID CDS (Father Response)			
		Head of household & wife/partner	Other	Overall	1993 SIPP (Sorensen)
Age					
	17-24	20%	12%	13%	11%
	25-34	22%	28%	27%	35%
	35-44	49%	39%	41%	42%
	45-54	6%	17%	15%	11%
	55+	3%	4%	4%	1%
	Mean age	34.7 yrs (s.d. = 1.6)	36.4 (s.d. = 1.3)	36 yrs (s.d. = 1.1)	(36 yrs)
Racial Composition*					
	White	60%	47%	50%	58%
	Nonwhite	40%	53%	50%	42%
Marital Status					
	(Re)married	28%	30%	29%	42%
	Separated/Divorced	61%	45%	46%	24%
	Never Married	11%	25%	22%	24%
Education					
	Mean years completed	13.1	12.2	12.4	12.3
	< 12 years	10%	35%	30%	25%
	12 -15 years	85%	57%	63%	60%
	16+ years	5%	7%	7%	(15%)
Employment and Income					
	Mother receives child support	58%	48%	50%	46%
	Working**	98%	82%	85%	81%
	Median Total Household Income***	$45,000	$30,000	$32,000	$26,462
	Mean Earnings per Hour (n=66)	$7.9	$8.3	$8.1	
	Mean Earnings per Day (n=6)	$65	$52	$63	
	Mean Earnings per Week (n=49)	$336	$467	$462	
	Mean Earnings Every 2 Wks (n=10)	$1,094	$419	$524	
	Mean Earnings per Month (n=8)	$1,289	$2,106	$1,927	
	Mean Earnings Per Year (=67)	$51,259	$43,363	$45,423	
Children					
	Has other children	36%	42%	41%	
	Mean number of other children	1.8	2.7	2.5	
	Distance from child (median mi.)	10	17	15	
	Mean yrs since lived w/child	4.9	4.3	4.4	
		n=54	n=197	n=251	n = 1441

Source: Sorensen, E. and Wheaton, L. (2000). Income and Demographic Characteristics of Nonresident Fathers in 1993. Prepared for the Office of the Assistant Secretary for Plannng and Evaluation, DHHS, June 2000; Sorensen, E. (1997). A National Profile of Nonresident Fathers and Their Ability to Pay Child Support. *Journal of Marriage and the Family*, 59 (November 1997): 785

* Child's race is used as a proxy for father's race, which is not reported in the PSID CDS

*** Sorensen computes the percent of fathers who worked 50+ weeks in the last year. It is unclear how many weeks the respondent nonresident fathers in the PSID CDS worked. 86% reported that they were working at the time of the survey.

**** PSID CDS Household income includes the nonresident father's income plus any other income to members in his household. 87 respondent nonresident fathers who didn't know their household income are not included in the calculations. The SIPP figure is median family income. It is lower than PSID CDS because it includes incarcarated men with no income.

Table 5.3 describes the characteristics of the nonresident father respondents to PSID Child Development Supplement. The profile of these men is contrasted with that of Sorensen and Wheaton (2000). In contrasting the two sets of estimates it is important to remember that the SIPP is a sample of men/fathers who report about income transfers to children 18 and younger, while the PSID-CDS is a sample of children 12 and younger. Moreover, Sorensen and Wheaton adjusted for underrepresentation of men in the military, incarcarated men, and men underrepresented in the 1990 U.S. Census. Such adjustments were not made to the PSID CDS. These differences make the datasets are not perfectly comparable. Despite this drawback, Sorensen's summary of nonresident father characteristics provides a useful comparison.

The information in Table 5.3 indicates that the PSID CDS analytic sample is made up of nonresident fathers who are slightly older and more often nonwhite than those in the SIPP.[30] The age difference is somewhat surprising since the SIPP samples men with older children than the PSID CDS. That the PSID CDS consists of a larger percentage of nonwhite fathers is to be expected since the SIPP identifies nonresident fathers as men who make financial transfers to children living elsewhere. Such men tend to be white.

With respect to marital status, it appears that a greater percent of the respondent nonresident fathers in this sample are separated or divorced than those described by the SIPP. Again, these differences are likely to be related to different sampling the strategies. Because the PSID CDS sampled children 12 and younger, a greater proportion of their fathers are likely to have recently separated from the mother. By

contrast, the SIPP sampled fathers with nonresident children of all ages. Because the SIPP sample contains fathers with much older children, they are likely to have separated from the mother less recently and subsequently (re)married. While the SIPP distinguishes between nonresident fathers who are married for the first time (19 percent) and those who are remarried (23 percent), the PSID CDS only asks fathers if they are "(re)married." Approximately the same proportion of nonresident fathers are never married in both the PSID CDS and the SIPP.

This sample of fathers appears to be less educated than the SIPP sample. Whereas 25 percent of the nonresident fathers in the SIPP indicated that they had less than a high school degree, 30 percent of PSID CDS respondent nonresident fathers had a similar level of education. Whereas 15 percent of SIPP nonresident fathers had a bachelor's degree or more, only seven percent of the PSID CDS sample of nonresident fathers do. This is attributable to the greater proportion of nonwhite fathers in the PSID CDS. Analysis by child's race indicates that white children have fathers who have completed an average of 13.1 years of schooling (s.d. = 2.67) and nonwhite children have fathers who report completing an average of 11.7 years of schooling (s.d. 2.01). Consistent with the profile of never-married fathers presented in Chapter 2 (Veum, 1992), the subsample of fathers whose children live with a single-parent (25 percent of whom are unwed fathers) a significant portion of have less than a high school degree (35 percent).

Approximately the same proportions of fathers in the PSID CDS and the SIPP are employed. However, employment status is not measured the

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[30] Child's race is used as a proxy for father's race because information on the latter is not readily available.

same way in the SIPP and PSID CDS. When calculating the percentage of employed fathers, Sorensen and Wheaton (2000) report the percentage of nonresident fathers who worked full-time all year (56 percent) and part-time/part-year (25 percent). By contrast, nonresident fathers who responded to the Child Development Supplement were only asked whether or not they were working at the time of the survey. There is no indication as to whether or not they were employed full- or part-time, or for what period of time they had been employed.

Table 5-4: Income and Education of Working Nonresident Fathers

How paid	Mean Earnings	Annualized (FT;52 wks year)	Median Yrs Schooling	n
Per Hour	$8.17	$16,985.11	12	76
Per Day	$52.66	$13,690.99	11	8
Per Week	$460.62	$23,952.41	12	39
Every 2 Wks	$523.77	$13,618.09	12	4
Per Month	$1,926.97	$23,123.62	13	9
Per Year	$45,211.50	$45,211.50	14	70
Item Nonresponder				1
Total Working for Money				207
Total Not Working for Money				44

Nonresident fathers who responded to the CDS were also asked about their income. Specifically, they were asked how much pretax income they earned and how those earnings were calculated (hours, days, weeks, months, etc.). Unfortunately, they were not asked how many hours, days, weeks, or months they had worked in the past year. As such, reliable annual pretax income cannot be calculated from the data provided. However, as table 5.4 shows, men who recalled their wages in terms of hourly, daily, or monthly rates were less educated and earned less money than those who recalled their salary in terms of pretax annual income. Given that the nonresident fathers in the PSID CDS are less educated than the nonresident fathers profiled by Sorensen and Wheaton (2000) it is likely to be the case that their average income is slightly lower than those in the SIPP.

There are statistically significant differences in income by race. First, while the median household income for all nonresident fathers in the PSID CDS is $32,000, white children have fathers with median household incomes of $42,000 and their nonwhite counterparts' fathers have a median of $22,000. The difference in medians by race is statistically significant ($p < 0.001$). This is partially attributable to differences in educational attainment, and partially attributable to marital status. Whereas 37 percent of fathers of white children are (re)married, only 22 percent of fathers of nonwhite children are. Whereas 35 percent of nonwhite children's fathers have never been married, only seven percent of white children have fathers in a similar situation. It is also the case that white children have fathers who recall their wages in terms of an annual salary (44 percent v. 19 percent) or weekly salary (20 percent v. 15 percent), as compared to nonwhite children's fathers who tend to recall wages paid by the hour (43 percent v. 28 percent).

The Child Development Supplement provides information about the nonresident fathers that is not available from Sorensen and Wheaton's SIPP profile. In addition to information about fathers' opinions about parenting and their own experience with their fathers (which is not summarized here), the PSID CDS provides information on the nonresident father's children. We learn that 40 percent of the nonresident fathers in the PSID CDS sample have children other than those they had with the mother of the respondent child. A greater percentage of nonresident fathers' whose children live with a single mother have additional children (42 percent) than those who children in a "head and partner" household (36 percent). On average, the former fathers have an additional 2.7 children, whereas the latter has 1.8 other children.

The data also indicate the median distance between the nonresident father and the child is 15 miles. The median is reported here because the variable "distance from the child" is highly skewed. The mean distance of the respondent nonresident father from the child is approximately 195 miles, with a minimum distance between the two of less than one mile and a maximum distance of 3000 miles. This variation is driven by nonresident fathers of children in "other" households. They tend to live farther away from their children (mean = 267 miles, sd = 651) than fathers whose children live in a "head and partner" household (mean = 41 miles, sd = 115).

We also learn that, at the time of the survey, the average nonresident fathers had not lived with his child in almost four years. Fathers whose children lived with a single parent had lived with their children more recently than fathers whose children lived in a "head and partner" household. Research indicates that visitation appears to wane the longer the father and child live apart (Seltzer, 1991).

SUMMARY

With respect to household characteristics, the majority of children in the PSID CDS analytic sample with a respondent father live single-parent households in which the primary caregiver is the mother - the bulk of whom (40%) have never been married. These families have lower incomes than the "head-of-household and wife" households, in which heads of household are more likely to be working or retired than in the single-parent families. Not surprisingly, a larger percentage of the latter families are in poverty.

Some of the characteristics of sample children differ by the type of household they live in. Children who live in "head and partner" families tend to be white and female, while those who live in single parent homes tend to be nonwhite and male. While the weight of the children at birth is approximately the same in both types of households, more of those who live with single parents were born before their due date and had Medicaid pay for related medical costs than those living in "head and partner" household. Children living in the latter type of household visit the doctor more times per year than those living with a single parent. This may be partially explained by the fact that a higher percentage of children in "head and partner" household have non-Medicaid health insurance.

The characteristics of the nonresident fathers of the children in this sample appear to be a mix of the profile of divorced and never-married fathers presented in Chapter 2. Like divorced fathers, the PSID CDS sample is slightly older than the SIPP nonresident father sample. But, like the profile of unwed fathers, these fathers are more likely to be nonwhite and have relatively low levels of education. Unfortunately income and employment data cannot be compared with the profile generated from SIPP data. At minimum, however, additional analysis shows that many of the CDS working fathers are paid daily, hourly, or monthly and have incomes comparable to the SIPP profile. Significant differences exist between fathers whose children are white and those whose children are not white. Like resident fathers, white fathers tend to be better educated and have higher levels of income. They are more likely to be salaried employees and to pay child support.

The profile of nonresident fathers in the PSID CDS does not match the portrait generated from the adjusted SIPP data along all dimensions.

The former contains a higher percentage of nonwhite fathers than the latter. It is unclear whether or not this means that the PSID CDS over represents such fathers, or if the SIPP under represents them. In either case, using the new analytic weights the PSID CDS describes a population of low-income families in which children are largely young, nonwhite, and born out-of-wedlock. Primary caregivers tend to be single-mothers, many of the nonresident fathers are not (re)married and have low- to moderate-levels of education and income. This is, in fact, the population of families with which much recent public policy is concerned.

CHAPTER 6 : DISCREPANCIES IN MOTHER AND NONRESIDENT FATHER REPORTS

Do mothers' and fathers' reports of nonresident father characteristics and behavior agree or disagree? To what extent do they agree or disagree? This chapter addresses these questions by comparing the reports of mothers and nonresident fathers on 22 questions asked by the PSID Child Development Supplement. All analysis presented here uses the nonresponse-adjusted weights developed in Chapter 4.

METHODS FOR EVALUATING DISCREPANCIES

Agreement between mother- and father-reports is evaluated in three ways. First, the central tendency of both distributions are compared using a Wald test in the case of continuous variables, and a Wilcoxian matched pairs sign rank test in the case of nominal and ordinal variables. In the case of nominal variables with dichotomous outcomes, this sign test is equivalent to McNemar's Q, which tests the null hypothesis that the population median of the paired differences from matched pairs is zero. For continuous variables attention is paid to both the means of the two distributions and the variability around them.

Second, the strength and/or presence of a relationship between mother- and father-reports is evaluated using Pearson's correlation coefficient in the case of continuous variables, and Spearman's correlation coefficient in the case of ordinal variables. The phi coefficient (r_ϕ) is reported as a measure of association for nominal variables. The phi coefficient is comparable to the Pearson correlation coefficient in this case because it is derived from 2 x 2 contingency tables. In the case of ordinal and nominal variables a chi-squared test

is also used to evaluate whether or not a relationship exists between mothers' and fathers' reports of the same variable.

Table 6-1: Statistical Tests Used to Evaluate Discrepancies Between Mother- and Father-Reported Data

	Equality of Central Tendency	Correlation	Description of Percent Agreement
Type of Variable	Statistical Test to be Evaluated		
Continuous	Wald test	Pearson's rho	Percent Agreement
Ordinal	Wilcoxian paired sign rank test	Chi-squared test of independence; Spearman's rho	Weighted Cohen's Kappa
Nominal	Wilcoxian paired sign rank test; McNemar's Q	Chi-squared test of independence; Phi; Spearman's rho	Percent agreement Unweighted Cohen's Kappa

Finally, measures of agreement are provided. For continuous variables, percentage of agreement within an explicit range is presented. For ordinal and nominal variables, Cohen's Kappa is used. Cohen's Kappa is a measure of inter-rater reliability and is used when ratings are categorical. It differs from the percent agreement approach because it takes into account the fact that both raters could agree by chance. The kappa coefficient equals one if there is perfect agreement between the mother and the father. A value of zero indicates a level of agreement expected by chance alone.

Kappa Value	**Interpretation**
Below zero	poor agreement
0.00-0.20	slight agreement
0.21-0.40	fair agreement
0.41-0.60	moderate agreement
0.61-0.80	substantial agreement
0.81-1.0	almost perfect agreement

(Landis and Koch, 1997a as cited in STATA Manual, 1997: 279)

A weighted Kappa is used if variables are measured on an ordinal scale, where disagreement that is one category apart is considered less of a disagreement than one that is two or three categories apart. In computing the inter-rater agreement, this approach weights lesser

discrepancies more heavily than discrepancies that are further apart (STATA Manual, 1997: 281). Weighted kappa is typically not appropriate for purely categorical variables where there is no ordering of the values. As such, an unweighted Kappa is used for nominal variables (Service, 1999). The extent of mother-father disagreement is also presented.

QUESTIONS BEING COMPARED

Resident mothers and nonresident fathers were asked twenty-four identical or similar questions about the fathers' characteristics, engagement with the child, and relationship with the child's mother. If the format of the question's answer varied between the mother and the father, changes were made to make the questions comparable.[31] Some questions, such as those related to frequency of father visitation, could not be made comparable due to the format and the reference period of the question. As a result, only 22 of the 24 questions are used in this analysis. Univariate tabulations of mothers' and fathers' responses to these questions can be found in Appendix A.

Skip patterns and child-households omitted from analysis

Although similar questions were asked of both parents, the order of the questions and the skip patterns in the separate questionnaires differ for mothers and nonresident fathers.[32] (See Figure 6-1) Skip

[31] Changes usually involved the alignment of response categories, which were often ordered in opposite directions.

[32] In many cases the skip patterns seem difficult to justify. For example, mothers are not asked about fathers' financial contributions toward the child if she says the father hasn't seen the child in the last year. However, fathers can make financial contributions even if they never visit. Do they? Fathers were asked this question even if they hadn't seen the child but had spoken to the mother in the last year (n=14). In 97 percent of these cases fathers indicated that they buy clothes or presents for the child. In 40 percent of the cases fathers reported providing medical insurance coverage. In 35 percent of the cases, they say they pay for camp or lessons. In 14 percent of cases, they say

patterns apply to questions about fathers' behaviors with and toward the child (as opposed to fathers' characteristics). Skips in the mothers' questionnaire are conditional on the father having seen the child in the previous 12 months. By contrast, skips in the fathers' questionairre are conditional on the father having spoken to the mother more than once in the previous year. In one case the fathers' skip pattern is conditional on him having seen the child at least 12 days in the previous year. Only cases in which both mothers' and fathers' skip patterns apply are analyzed. The result is that sometimes child households are omitted from the analysis. Although constraining the analysis to these cases makes comparing "apples to apples" challenging, analysis using chi-squared tests (not shown here) indicates that excluded and included households are not statistically significantly different from each other along policy dimensions of interest, such as poverty status, child support receipt, AFDC participation, food stamp participation, child's race, or household type.

ANALYSIS OF DISCREPANCIES IN MOTHER- AND FATHER-REPORTS

Father's Characteristics

While it is generally the case that there is no "right answer" against which mothers' and fathers' reports can be evaluated, two exceptions are fathers' marital status and presence of other children. In these cases the nonresident fathers' reports can be considered the "gold standard" against which the mothers' reports can be evaluated.

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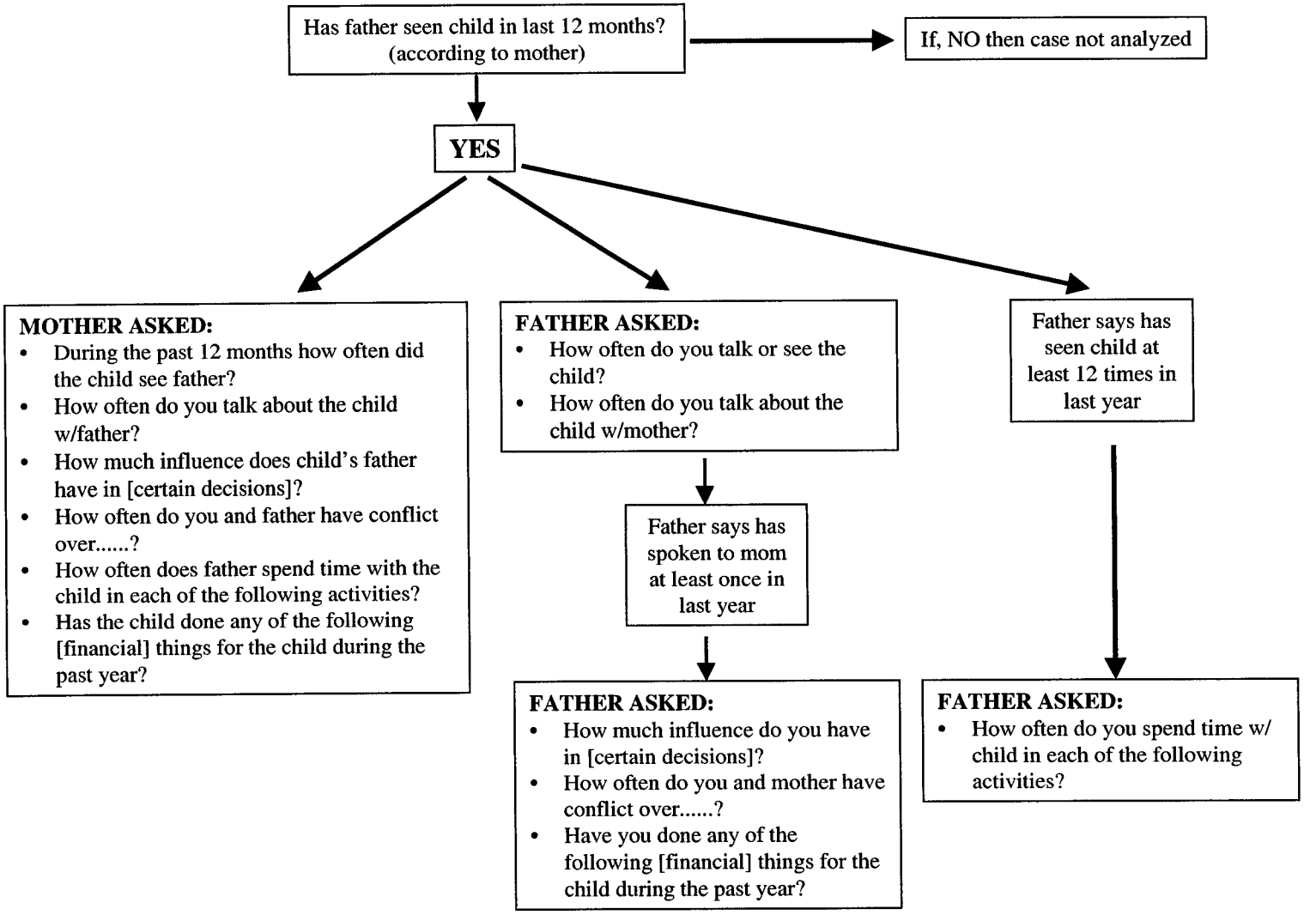
they pay for uninsured medical expenses. In 12 percent of the time they indicate that they take the child on vacations. In fact, in all but one of the 14 cases the father reports some type of financial contribution.

Figure 6-1: Skip patterns associated with the fathers' behavior questions

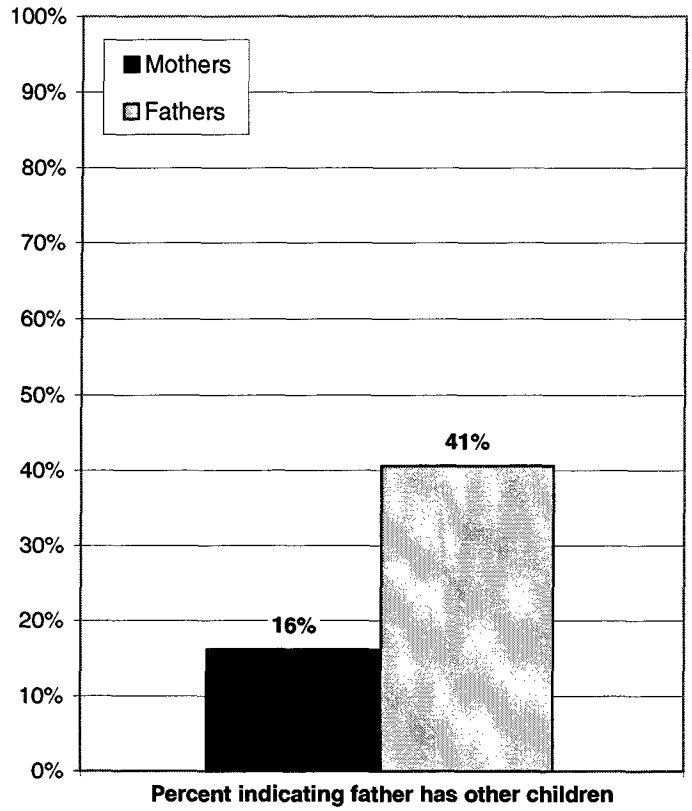


The data in table 6.2 show that mothers are only partially aware of the nonresident father's characteristics. They are more likely to know about things that, on the surface of it, pertain directly to involvement with the child - such as how far away the father lives. Approximately 80 percent of mothers and nonresident fathers agree on the father's location within 15 miles. The correlation between their reports is quite high ($r= 0.834$, $p < 0.05$). While a slightly higher percentage of mothers do not know how far away the father lives (5.1 percent for mothers versus 2.4 percent for fathers), the overall percentage of mothers in this sample who "do not know" is quite small.

It is important to point out that most mothers who do not know the father's location were probably unable to provide sufficient information to the PSID to locate and interview the father. As such, those child-households are missing from the subsample of households with respondent nonresident fathers. In the larger sample of households that include both respondent and nonrespondent nonresident fathers (n=1124), 23.63 percent of mothers did not know where the father lived - as compared to 5.1 percent in the subsample of households with respondent fathers.

There is moderate agreement between parents with respect to the father's current marital status. In this case, mothers and fathers agree approximately 81 percent of the time. To the extent that mothers are wrong in their reports, they tend to report that fathers are not married when they are. Only 3 percent of mothers' admitted that they did not know the father's marital status.

Figure 6.1: Does father have other children?



What mothers seem to know about least is whether or not the nonresident father has had children other than those he had with her, and if so, how many. Mothers underreport the number of other children relative to fathers (mothers' mean = 0.79; fathers' mean = 2.48). Perhaps fathers feel that former spouses/significant others need not be privy to this information. Whatever the reason, the fact the mothers may not know has implications for research. Analysis presented previously indicates that nonresident fathers with children other than those they had with the mother are less

Table 6-2: Discrepancies between mother- and father-reports of father's characteristics

Question	Equality of Central Tendency	Correlation†	% Agreement†	n
How far away from here does father live *(miles)?*	mother mean (se) = 226 (63) father mean (se) = 241 (59) % mother "don't know" = 5.1% % father "don't know" = 2.4% F-test: p = 0.759	r = 0.834	% agreement w/in 15 mi. = 79.6%	251
Is father currently married?	% father yes: 30% % mother yes: 26% % mother "don't know": 2.85% Sign test/McNemar's test: p = 0.193	% mother & father yes = 18.9%* % mother & father no = 60.2%* phi/r = 0.534	% mother yes & father no = 6% % mother no & father yes = 15% % agreement = 80.7% (Kappa = 0.532)	251
Does he have children other than those w/mother?	% father yes: 41% % mother yes: 16% % mother "don't know": 0.27% Sign test/McNemar's test: p = 0.000	% mother & father yes = 18.5%* % mother & father no = 58.5% phi/r = 0.477	% mother yes & father no = 2% % mother no & father yes = 21% % agreement = 73.3% (Kappa = 0.389)	m: 251 f: 250
How many other children? *(Conditional on father answering "yes" to previous question)*	mother mean (se) = 0.79 (.25) father mean (se) = 2.48 (.34) F-test: p = 0.000	r = 0.086 (p = 0.395)	% exact agreement = 77.0% (Ordinal Kappa = 0.193)	95

F-test is a Wald test adjusted for the survey design: H_o: $\hat{\mu}_{mother} - \hat{\mu}_{father} = 0$;

Sign test: H_o: median of difference=0
Chi-squared test: H_o: variables are distributed independently, unless otherwise indicated the p-value of the chi-squared test < 0.05
Kappa test: H_o: % agreement could have occurred by chance

† Unless otherwise noted, p < .05
* Excludes "don't know" responses by mother

likely to visit. Misreporting on the part of mothers who are acting as proxy reporters for nonresident fathers weakens this indicator as a possible explanation for nonresident father involvement. Even among those mothers who do know that the father has other children, they are unlikely to know exactly how many children he has.

An important policy concern is that estimates for child support policies of what fathers can afford to pay and the costs of their other family obligations almost always use mothers' reports. If mothers do not know about fathers' other obligations to children born before or after those they had with the mother respondent, then these estimates of fathers' ability to pay will include a great deal of error. Moreover, they may systematically overestimate fathers' ability to pay.

What are the characteristics of the child-households in which the mother knows how far away the father lives, his marital status, and/or if he has other children? The results of four logistic regressions provided in Table 6.3. All four regressions are the same except for the dependent variable. In the first regression the dependent variable indicates that the mother knows all three of the father's characteristics. The dependent variable for the second regression equals one if the mother and father agree on how far away he lives within 15 miles. In the third and four regression the dependent variable equals one if the mother knows the father's marital status, and if she knows if he has other children. These logistic regressions are intended as a description of which mother reports are likely to be less reliable than others. As with all regression analysis presented in this study, coefficients describe association with the dependent variable. Causal attributions should not be made.

Table 6-3: Results of Logit Regression

	Independent Variable (Binary)			
	Knows all 3 characteristics (1)	Knows how far away f lives (2)	Knows marital status (3)	Knows about other children (4)
Mother receives child support	1.74	1.47	2.28	1.23
Father has seen child in previous year	6.72***	12.01***	3.69**	1.02
Child-mother household is in poverty	4.09***	3.33*	0.71	4.45***
Child is female	2.26**	3.01**	0.96	1.62
Child is black	2.52*	3.82	1.70	0.25***
Child is other nonwhite	0.80	1.64	1.33	0.86
Child is under five years old	1.53	1.99	1.95	0.87
Head of child-mother household is never-married	6.51*	1.27	6.58**	12.91*
Head of child-mother household is widowed	1.65	0.26	5.36	95.21**
Head of child-mother household is divorced	23.11*	9.62	3.40	14.98*
Head of child-mother household is separated	15.76**	10.14	2.11	4.66
Head of child-mother household's education level	1.16*	0.86*	1.09	1.41***
Mother and nonresident father speak more than once a year	0.51	1.44	0.07**	0.55
Child lives in "other" household in which mother is unlikely to be married	0.07**	0.18	0.32	0.09*
Time since father has lived with the child	1.00	1.00	1.01	0.99
Constant	0.01***	0.30	1.57	0.08
Pseudo R^2				
N	249	249	249	249

* statistically significant at 0.10
** statistically significant at 0.05
*** statistically significant at 0.01

The mother is more likely to know about all three of the nonresident fathers' characteristics if:

- the father has seen the child in the previous year;
- the household is in poverty;
- the child is female;
- the child is black;
- the head of the child-mother household is not married; and
- the child lives in a home where there is a "head of household and wife/partner."

Finally, the higher the educational attainment of the head of household, the more likely the mother is to know about the nonresident father's characteristics. The counterintuitive finding regarding the household's poverty status may be partially explained by welfare laws that make receipt of assistance contingent on providing information about the

child's father. Across the three regressions, the strongest correlated with mothers' knowledge of the nonresident father's characteristics is whether or not the father has seen the child in the last year. The second best predictor is the head of household's marital status. After controlling for the household type, this makes sense. Mothers who are divorced or separated from the nonresident father, but not remarried, are more likely to rely on the absent father for financial and parenting support than are remarried mothers. In addition to their preexisting relationship with the nonresident father, they may make more of an effort to know about the father's characteristics and whereabouts. Never-married mothers are more likely to use welfare, and thus be required to provide information about the father as a condition for receipt of aid.

Father-child relations

This section examines the relationship between mother- and father-reports of the relationship between the nonresident father and the PSID CDS child. Father-child relations are evaluated using three categories of questions from the Primary Caregiver Child Questionnaire and the Nonresident Father Child Questionnaire. Results are presented in table 6.5

The first category of questions deals with frequency of visits. Four questions (three asked of the mother and the other of the nonresident father) were used to generate two measures of the frequency with which the father interacts with the child: one measure for the father and one for the mother. The four questions are:

1. Mother: (Q1J6) During the past 12 months, about how often did (child) talk on the phone or receive a letter from his/her father? Would you say: not at all; about once a year; several times a

year; one to three times a month; about once a week; or several times a week?

2. Mother: (Q1J8) Has father seen child in last 12 months? Yes or No?

3. Mother: (Q1J9) (Conditional on the father having seen the child in the last year) During the past 12 months, how often did the child see his/her father? about once a year; several times a year; one to three times a month; about once a week; or several times a week?

4. Father: (Q7A5) How often do you see or talk with (child)? Would you say: several times a week; about once a week; one to three times a month; several times a year; about once a year; less than once a year; or never?

The first three questions were combined into one measure that assesses how often the mother thinks the child communicates with or sees the father. In order to ensure that the most conservative approach was used to generate this variable, frequency of talking/writing is not added to the frequency of visiting. The details of this construction are provided in table 6.4.

Table 6-4: Construction of the mother-reported frequency of contact variable

Visitation frequency variable equals		Mother reported that the father talked on the phone with or wrote to the child….		Mother reported that, in the last 12 months, the father saw the child….
Never	if	Not at all	AND	Never
About once a year	if	About once a year	OR	About once a year
Several times a year	if	Several times a year	OR	Several times a year
1-3 times a month	if	1-3 times a month	OR	1-3 times a month
One or more times a week	if	About once a week OR several times a week	OR	About once a week OR several times a week

The advantage of combining these questions is that the mothers' reports of visitation/interaction frequency can be compared to fathers' reports. The disadvantage of approach is that slightly different types of father-child interaction are compared: the mother is asked about talking, seeing *and* writing, whereas the father is asked only about talking to and seeing the child. The result is that the mother is

likely to report slightly higher frequency of contact than fathers. Fortunately, the conservative approach to generating the mother-reported variable underestimates rather than overestimates the level of contact and hence runs in the opposite direction of the bias induced by omission of mail contact from the father-reported variable. Ideally, a comparison would be made between mothers' and fathers' reports of how many days the child visited with his or her father in a given time period. Unfortunately in the PSID CDS mothers and fathers were not asked about the same reference period.

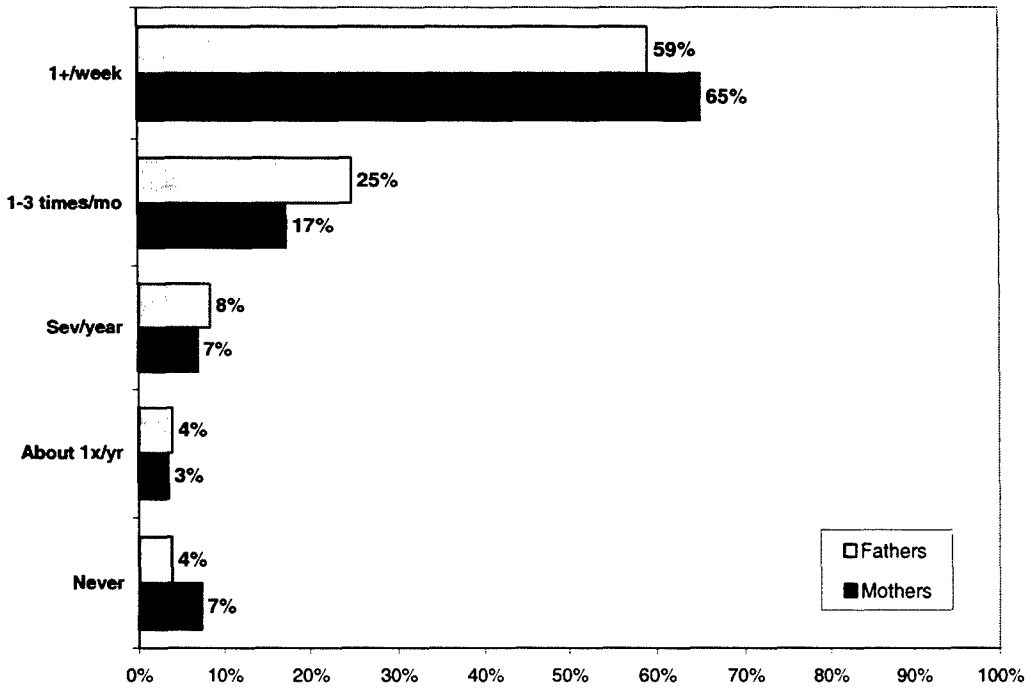
- Mothers were asked: How many days did the child stay with his/her father during the past 12 months? Because mothers' interviews were completed between March and November of 1997, the reference period for this question varies for each respondent.
- Fathers were asked: In 1996, how many days did the child actually spend with you? Since not one mother completed her PSID CDS interview in early January 1997, there is not one household for which these two questions are comparable.

In the absense of a specific number to use to evaluate father-child visitation, the "frequency of contact" variable constructed for this analysis remains the best approach for evaluating this construct.

Overall nonresident fathers and mothers report similar mean/median levels of contact. The correlation between their reports is moderate, as is the percent of agreement beyond chance. Figure 6.2 and table 3 in Appendix A show discrepancies lie in the extreme categories of reports. While fathers report having contact with their child "1-3 times per month," mothers report contact "about once a week" or more. Why might mothers report more contact than fathers? The difference between their reports may be due to 1) different interpretations of the categories available for response, 2) differences in the activities they report about, or 3) differences what they believe to be the reference period under consideration. As it is impossible to reject the null hypothesis

that the median is the same for both groups at p = 0.77, it might be the case that they are both reporting the same frequency but fathers (who may want to see their children more than they are able to) feel it is less frequent than mothers. Alternatively, "1-3 times per week" may mean the same thing for fathers that "about once a week" means for mothers.

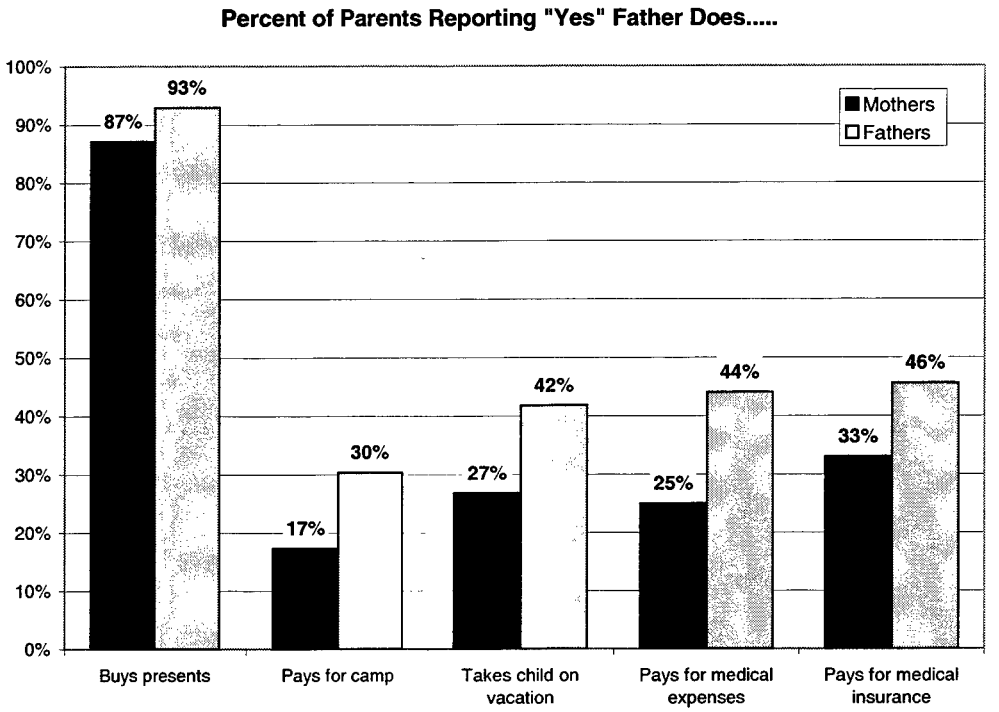
Figure 6.2: How often does father have contact with the child?



The second category of questions asked both parents deals with the father's financial contributions to the child. Both parents are asked if, in the last year, the father has paid for clothes, toys, or presents; for camp or lessons; for dental or uninsured medical expenses; and for medical insurance. They are also asked if he has taken the child on a vacation.

Figure 6.3: Percent of Parents Reporting that the Fathers Makes the Following Types of Financial Contributions

(Conditional on mother reporting that the child saw father in last year and father reporting he spoke to mother more than once in the last year)



With respect to financial contributions, nonresident fathers answer in the affirmative at a rate higher than mothers. The phi coefficients indicate only moderate levels of association between reports, with the highest on medical insurance. It appears that fathers make contributions mothers do not know about. Discrepancies around insurance may occur because fathers know about payments deducted from their earnings that mothers do not. Unfortunately, if mothers are unaware that insurance is being provided, benefits do not accrue to the child. She will be unaware that a claim needs to be filed. Discrepancies between parents' reports are somewhat starker with respect financial contributions than to frequency of contact because both parents were only given two choices for response: yes or no. While possible, it is less likely that a mother's definition of "yes" might overlap with a father's definition of "no" and visa versa.

Table 6-5: Discrepancies between mother- and father-reports of father-child relations

Question	Equality of Central Tendency	Correlation†	% Agreement†	n
During the last year, how often did the child have contact with the father? *(0 = Never, 1= 1x/yr, 2 = Sev.times/yr, 3 = 1-3x/mo, 4 = 1x/week, 5 = Sev. times/wk)*	mother median = 4 mean (se) = 3.3 (0.15) father median = 4 mean (se) = 3.3 (0.11) Sign test: p = 0.772	r = 0.431	% exact agreement = 82.5% (Ordinal Kappa = 0.317)	251
In the last year, has father:^ ***(Yes, No, Don't Know)***				
Bought clothes, toys, or presents for the child?	% mother yes: 87% % father yes: 93% % mother don't know: 1% Sign test/McNemar's test: p = 0.000	% mother & father yes = 86% % mother & father no = 2.8% phi/r = 0.496	% mother yes & father no = 2% % mother no & father yes = 9% % agreement = 90.6% (Kappa = 0.467)	213
Has father paid for camp or lessons for the child?	% mother yes: 17% % father yes: 30% % mother don't know: 1% Sign test/McNemar's test: p = 0.000	% mother & father yes = 14% % mother & father no = 61% phi/r = 0.447	% mother yes & father no = 3% % mother no & father yes = 22% % agreement = 77.9% (Kappa = 0.414)	212
Taken the child on vacation?	% mother yes: 27% % father yes: 42% % mother don't know: 1% Sign test/McNemar's test: p = 0.001	% mother & father yes = 34% % mother & father no = 72% phi/r = 0.473	% mother yes & father no = 7% % mother no & father yes = 20% % agreement = 74.7% (Kappa = 0.450)	213
Paid for dental or uninsured medical expenses for child?	% mother yes: 25% % father yes: 44% % mother don't know: 1% Sign test/McNemar's test: p = 0.000	% mother & father yes = 21% % mother & father no = 46% phi/r = 0.482	% mother yes & father no = 8% % mother no & father yes = 25% % agreement = 73.7% (Kappa = 0.444)	213
Paid for medical insurance for the child?	% mother yes: 33% % father yes: 46% % mother don't know: 0% Sign test/McNemar's test: p = 0.000	% mother & father yes = 29% % mother & father no = 51% phi/r = 0.617	% mother yes & father no = 3% % mother no & father yes = 16% % agreement = 80.4% (Kappa = 0.596)	213
How often does father spend time with child in:^^ ***(1 = Not at all, 2 = About once/year, 3 = Several times/year, 4 = 1-3 times/month, 5 = About once/week, 6 = Several times/week)***				
Leisure activities such as picnics, movies, sports, or visiting family friends?	mother median = 3 mean (se) = 3.13 (0.15) father median = 4 mean (se) = 4.01 (0.14) Sign test: p = 0.001	r = 0.394	% exact agreement = 79.0% (Ordinal Kappa = 0.262)	190
Religious activities?	mother median = 1 mean (se) = 1.88 (0.13) father median = 2 mean (se) = 2.47 (0.15) Sign test: p = 0.001	r = 0.401	% exact agreement = 79.5% (Ordinal Kappa = 0.343)	191
Talking, working on a project, or playing together?	mother median = 4 mean (se) = 3.29 (0.18) father median = 4 mean (se) = 4.53 (0.14) Sign test: p = 0.009	r = 0.380	% exact agreement = 76.6% (Ordinal Kappa = 0.304)	189
School or other organized activities?	mother median = 1 mean (se) = 2.29 (0.19) father median = 3 mean (se) = 2.82 (0.19) Sign test: p = 0.001	r = 0.207	% exact agreement = 70.8% (Ordinal Kappa = 0.220)	187

Sign test: H_o: median of difference=0
Chi-squared test: H_o: variables are distributed independently, unless otherwise indicated the p-value of the chi-squared test < 0.05
Kappa test: H_o: % agreement could have occurred by chance

† Unless otherwise noted, $p < .05$

^ Conditional on the mother reporting that child has seen father in the last 12 months AND father reporting that he spoke to mother more than one time in the past year (n=213).

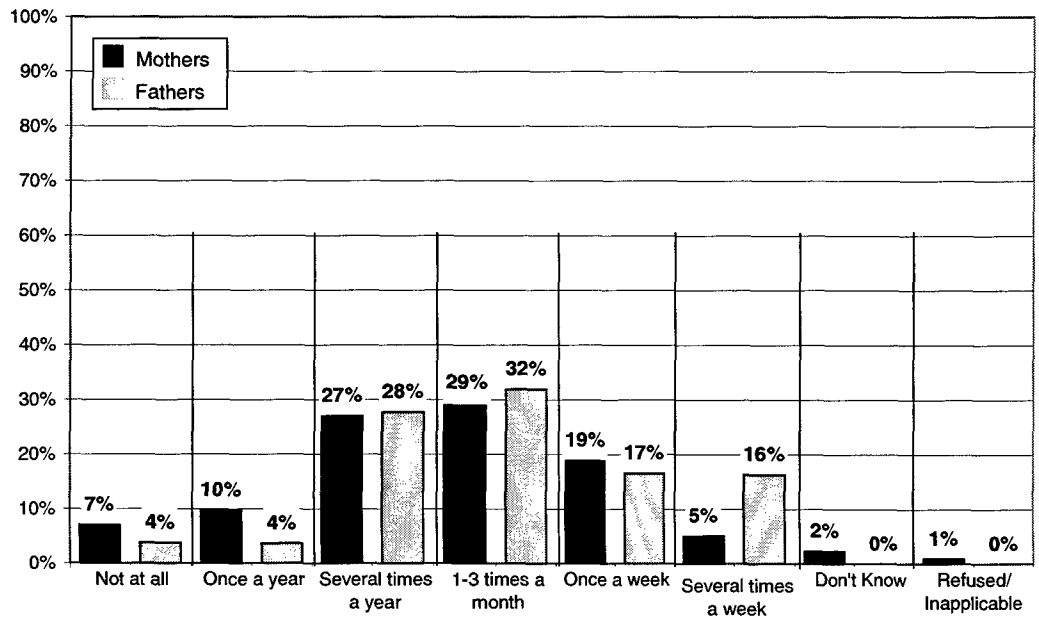
^^ Conditional on the mother reporting that child has seen father in the last 12 months AND father reporting that he spent 12+ days with child in last year (n=196).

The third category of questions deals with nonresident father engagement with the child. Both parents are asked how frequently the father engages in a variety of activities with the child: leisure activities; religious activities; talking, working together on a project, or playing together; and school or other organized activities. The questions related to engagement are measured on an ordinal scale that describes frequency.

Just as nonresident fathers consistently reported greater levels of financial contribution to their child, they also report higher levels of engagement than do mothers. The analysis of central tendency shows that, on average, fathers consistently rank themselves one level higher

Figure 6.4: How often do fathers engage in leisure activities such as picnics, movies, sports, or visiting family friends?

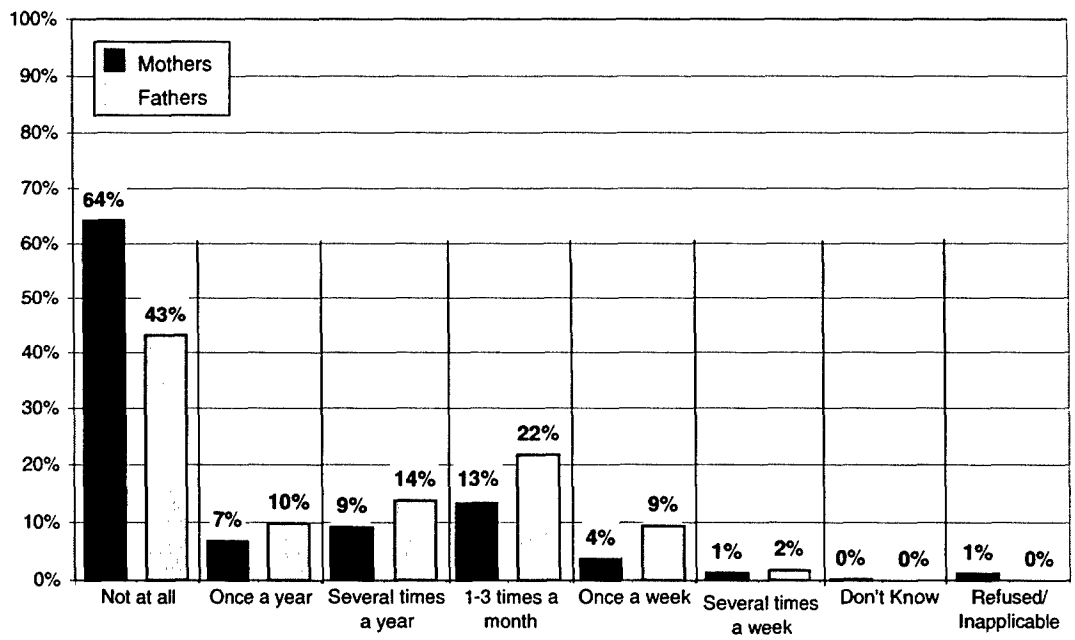
(Conditional on mother reporting that the child saw father in last year and father reporting he spent 12+ days with child in the last year)



than mothers on this scale. The null hypothesis of the equality of paired medians can be rejected at $p < 0.01$ in all cases, there are moderate-to-low levels of association between the two reports, and only fair levels of agreement beyond chance. Figures 6.4 through 6.7 indicate that while more mothers report that fathers engage in activities "not at all", fathers indicate higher levels of participation in other categories.

Figure 6.5: How often do fathers engage in religious activities?

(Conditional on mother reporting that the child saw father in last year and father reporting he spent 12+ days with child in the last year)



With respect to leisure activities, the biggest discrepancies are in the extreme categories of the Likert scale. This is not the case for engagement in religious activities. While the overwhelming majority of mothers feel that fathers do not participate in religious activities with the child at all, more fathers feel they do so once a year and once a week than do mothers. These discrepancies may reflect differences in what each parent views as a religious activity.

When it comes to talking, working on a project, or playing together, mothers are more likely to view fathers as doing these things "not at all" or "once a year", whereas a higher percentage of fathers report engagement in all other response categories.

Figure 6.6: How often does father spend time with the child talking, working on a project, playing together?

(Conditional on mother reporting that the child saw father in last year and father reporting he spent 12+ days with child in the last year)

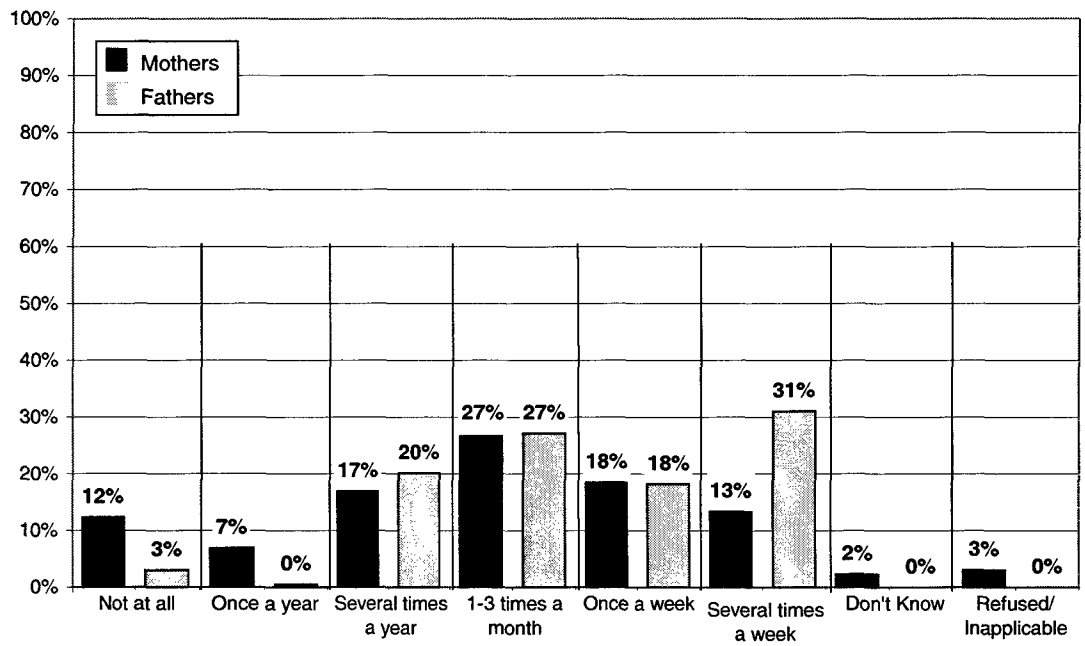
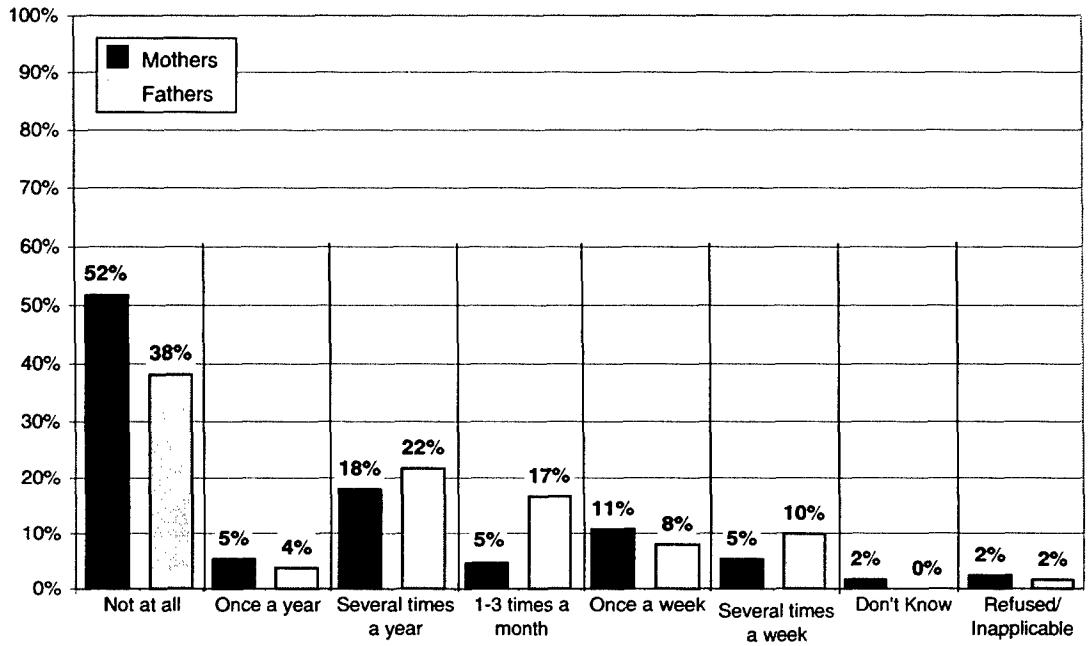


Figure 6.7: How often does father spend time with the child in school or other organized activities?

(Conditional on mother reporting that the child saw father in last year and father reporting he spent 12+ days with child in the last year)



Finally, as with all other types of engagement, many mothers report that fathers are "not at all" engaged with the child in school or other organized activities. By contrast, a greater percentage of fathers than mothers feel that they participate in these activities several times a year, 1-3 times a month, and several times a week.

There are three possible explanations for the discrepancies associated with father-child engagement. First, given the question was only asked of father who said they saw the child 12 or more days in the last year and no such constraints were put on the mother, one would expect fathers to report more engagement by construction. Second, as was the case for frequency of contact, mothers and fathers may have overlapping definitions of frequency. In this case, fathers (who want

to believe they are responsible parents) see themselves as highly engaged with the child, whereas mothers (who are unlikely to observe the father-child interaction and may rely on child-reports) view fathers as less engaged. Finally, it may be the case that mothers do not know about engagement they do not observe.

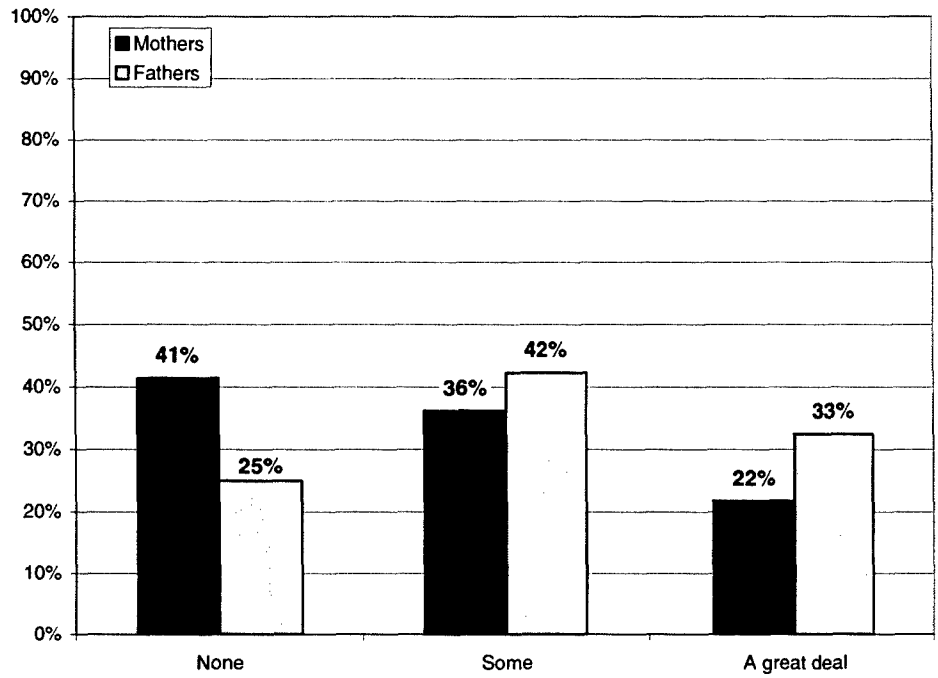
Mother-Father Relations

Three questions are used to evaluate the mother-father relationship. The first question asked of both parents in the same fashion is: How often do you talk about the child? The second question is: How much influence does the (father) have in decisions about such things as education, religion, and health care? Finally, both parents are asked about how often they find themselves in conflict over six issues: 1) where the child lives, 2) how the child is raised, 3) how the child is disciplined, 4) how the mother spends money on the child, 5) how the father spends money on the child, and 6) the father's visits with the child

With respect to interparental communication, both parents are in moderate agreement about how frequently they talk about the child. The Kappa statistic indicates that they experience fair agreement beyond chance. To the extent that there are discrepancies in reports, fathers tend to report more frequent communication about the child than do mothers. Generally mothers and fathers are one category apart in their assessment. As was the case with previous measures of frequency, this may indicate that parents interpret response categories slightly differently. What some fathers refer to as "once a week" some mothers may refer to as "1-3 times a month."

Figure 6.8: How much influence does the father have in making decisions about such things as education, religion, and health care?

(Conditional on mother reporting that the child saw father in last year and father reporting he spoke to mother more than once in the last year)



Do mothers and fathers agree about the father's influence in child-rearing decisions? Figure 6.8 clearly shows that fathers feel they have more influence than do mothers. This is confirmed by results of a chi-squared test that indicate that the null hypothesis of independence between mother- and father-reports cannot be rejected. A very low kappa statistic and a Spearman's rho of small magnitude also suggest that mothers and fathers tend to disagree about fathers influence in child-rearing decisions. In fact, fathers report higher levels of influence than do mothers. Whereas 29% of fathers say they have no influence over such child-rearing decisions as education, religion, or health care, 46% of mothers say they do not. By contrast, 20% of mothers say the nonresident father has a "great deal" of influence, while 31% of fathers say they do. While these results suggest that fathers may view their parenting activities and influence

in a more positive light than mothers, some degree of overreporting relative to mothers is to be expected since fathers' reports are conditional on their report of having seen the child at least 12 days in the previous year.

Low kappa statistics and statistically insignificant correlations indicate that nonresident fathers and mothers also exhibit disagreement about the level of conflict they experience regarding issues that concern the child. Fathers perceive higher levels of conflict around issues of where the child lives, how the child is raised, and how the child is disciplined. As Figure 6.9 and tables 16 through 18 in Appendix A show, a higher proportion of mothers indicate that the parents "never" disagree about these issues, while a higher proportion of fathers report that conflict exists "sometimes" than do mothers. When it comes to money, mothers believe there are higher levels of conflict around how the father spends money and fathers believe there are higher levels of conflict around how mothers spend money. This suggests that each parent is more likely to view issues that relate to themselves in a positive light. As such, it is not surprising that fathers perceive there to be less conflict around their visits with the child than do mothers. A more favorable outlook on the part of fathers is expected, to some degree, because fathers' responses are conditional on his report that he spoke to the mother at least once in the last year.

Figure 6.9: Mothers' and fathers' reports of interparental conflict
(Conditional on mother reporting that the child saw father in last year and father reporting he spoke to mother more than once in the last year)

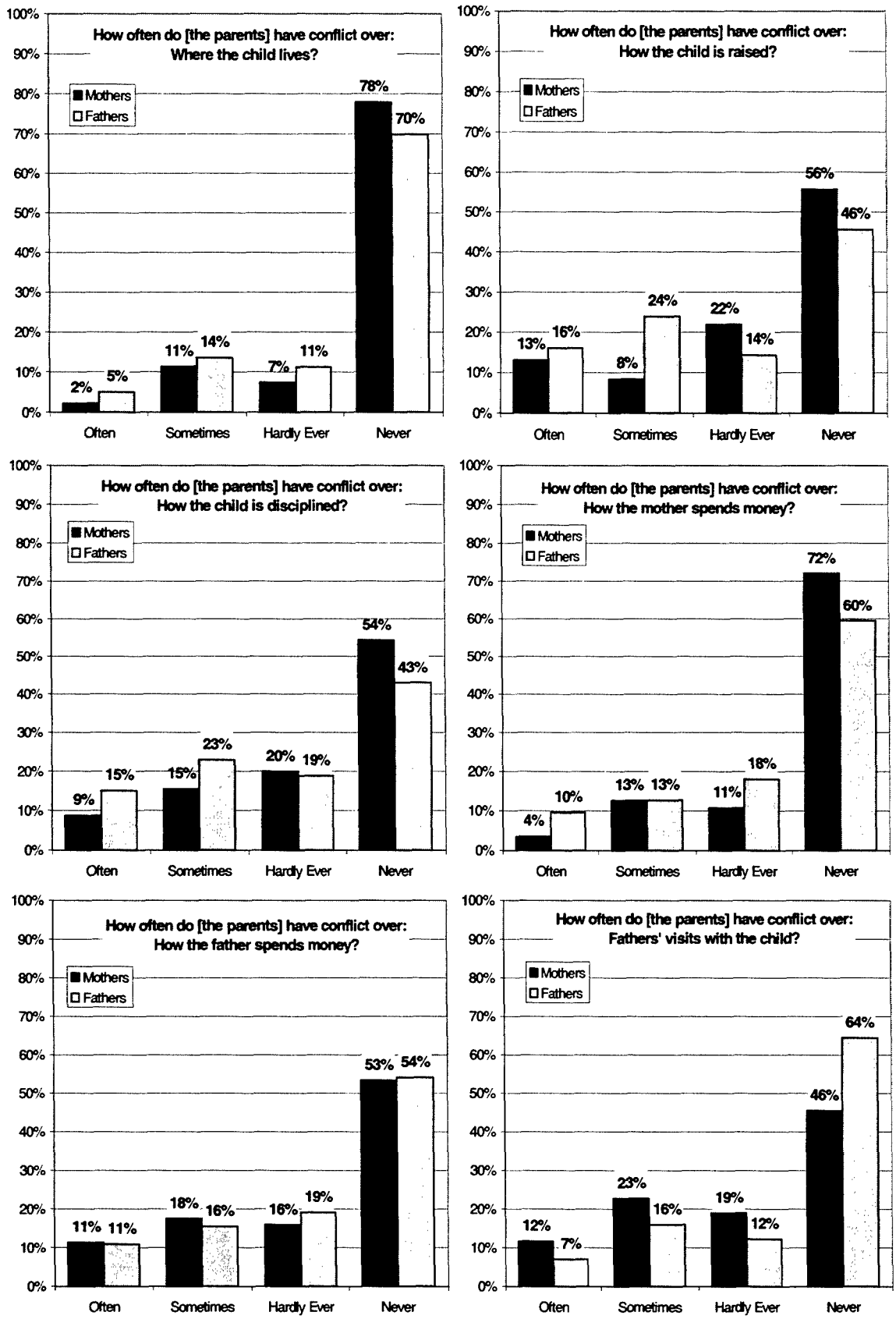


Table 6-6: Discrepancies between mother- and father-reports of mother-father relations

Question	Equality of Central Tendency	Correlation†	% Agreement†	n
How often do you talk about child?^^^ *(1= Never, 2= 1x/yr, 3= Severao/yr, 4= 1-3x/mo, 5= 1x/wk, 6= Several/wk)*	mother median = 4 mean = 4.09 (0.17) father median = 5 mean = 4.59 (0.14) Sign test: p = 0.003	r = 0.393	% exact agreement = 75.3% (Ordinal Kappa = 0.310)	232
How much influence does father have in decisions about such things as education, religion, and health care?^^ *(1= None, 2= Some, 3= A great deal)*	mother median = 2 mean(se)= 1.80 (0.08) father median = 2 mean(se)= 2.10 (0.08) Sign test: p = 0.028	χ^2 p = 0.124 r = 0.246	% exact agreement = 64.4% (Ordinal Kappa = 0.172)	213
How often do you and the child's father have conflict over:^^ ***(1= Often, 2= Sometimes, 3= Hardly Ever, 4= Never)***				
Where child lives?	mother median = 4 mean(se)= 3.62 (0.09) father median = 4 mean(se)= 3.46 (0.09) Sign test: p = 0.023	r = 0.024 (p = 0.733)	% exact agreement = 75.8% (Ordinal Kappa = 0.013)	213
How s/he is raised?	mother median = 4 mean(se)= 3.24 (0.11) father median = 3 mean(se)= 2.89 (0.12) Sign test: p = 0.013	r = 0.092 (p = 0.180)	% exact agreement = 63.7% (Ordinal Kappa = 0.095)	213
Disciplining child?	mother median = 4 mean(se)= 3.24 (0.10) father median = 3 mean(se)= 2.89 (0.12) Sign test: p = 0.000	r = 0.128 (p = 0.063)	% exact agreement = 67.9% (Ordinal Kappa = 0.175)	212
How mother spends money on child?	mother median = 4 mean(se)= 3.53 (0.08) father median = 4 mean(se)= 3.27 (0.10) Sign test: p = 0.001	r = 0.179	% exact agreement = 75.9% (Ordinal Kappa = 0.195)	210
How father spends money on child?	mother median = 4 mean(se)= 3.13 (0.11) father median = 4 mean(se)= 3.16 (0.11) Sign test: p = 0.145	r = 0.250	% exact agreement = 72.5% (Ordinal Kappa = 0.251)	213
His visits with child?	mother median = 3 mean(se)= 2.99 (0.11) father median = 4 mean(se)= 3.34 (0.10) Sign test: p = 0.995	r = 0.156	% exact agreement = 69.8% (Ordinal Kappa = 0.179)	213

Sign test: H_o: median of difference=0
Chi-squared test: H_o: variables are distributed independently, unless otherwise indicated the p-value of the chi-squared test < 0.05
Kappa test: H_o: % agreement could have occurred by chance

† Unless otherwise noted, p < .05
^^ Conditional on the mother reporting that child has seen father in the last 12 months AND father reporting that he spoke to the mother more than one time in the past year (n=213)
^^^ Conditional on the mother reporting that child has seen father in the last 12 months (n=232)

LIMITATIONS OF ANALYSIS

As indicated previously, skip patterns in the mothers' and fathers' questionaires differ. Limiting analysis to cases in which both mothers' and fathers' skip patterns apply permits comparison of "apples to apples" but decreases sample size, reduces analytic power, and limits generalizability of the results to child-households with specific characteristics.

It is also the case that mothers and children were interviewed prior to fathers. In some cases, many months lapsed between the mother's and father's interviews. As a result, the reference period for each parent differs. Fortunately, only one of the questions analyzed here specifically indicates a reference period of the previous year (visitation frequency). However, some parents may assume the other questions refer to activities/issues associated with preceding 12 months. This is only a problem if the nonresident fathers' behavior, relationship with the child, and/or relationship with the mother differ between reference periods. Unfortunately, constraining analysis to only those cases in which the mother and father could reasonably be assumed to refer to the exact same reference period would reduce the sample size to almost nothing.

Finally, it is important to point out that mothers' and fathers' interviews occurred sequentially, as the mother was relied on to provide information about the father. In some cases fathers were located and interviewed within days of interviewing the mother. In many cases it took weeks or months to locate and interview fathers. The median difference is 27 days, with a range of 0 to 225 days. It is possible that some of the fathers' characteristics (i.e. marital status) or

behaviors (i.e. payment of medical expenses) changed in the intervening period. If so, the presence of a discrepancy between mothers' and fathers' reports would be due to changes that occurred over time and not to any fundamental disagreement between parents about the characteristic or behavior. While this may have occurred in very few cases, analyis of biserial correlations indicate no statistically significant relationship ($p < 0.01$) between the time between interviews and the presence of any type of discrepancy.

SUMMARY

What do all of these findings about reporting discrepancies suggest? First, these results confirm the hypothesis that statistically significant discrepancies between mother- and father-reports of nonresident father characteristics and behavior do exist. Second, it appears that there are certain types of households in which the mother knows less about the nonresident father's characteristics than others. This calls into question the true value of mothers' reports regarding father characteristics in these cases. In particular, reports of the nonresident father's marital status, whether or not he has other children, and the number of other children appear to be the least reliable for these types of child-households.

In the case of fathers' marital status and other children, fathers' reports can be viewed as the "correct" reports. When it comes to father-child relations, and mother-father relations, there is no available "correct" answer against which mother- and father-reports can be evaluated. In these cases what is important is to understand trends in reporting patterns. Two themes emerge: First, fathers tend to report higher levels of financial involvement, parental engagement, and

parental influence than mothers. They report more frequent interparental communication and less conflict about child rearing. Overall, their reports paint a more positive portrait of nonresident father involvement than do mothers. The exception to this trend is the tendency of nonresident fathers to view their visits with the child as less frequent than mothers (although this may be an artifact of variable construction). Second, while mothers underreport financial involvement, paternal engagement, paternal influence, and interparental communication relative to fathers and overreport certain types of conflict - the fact that they perceive there to be less conflict around issues related to themselves suggests that mothers, like fathers, view that which applies directly to them in a favorable light.

Finally, the discrepancy between mothers' and fathers' reports is a matter of degree. Often, mothers' and fathers' responses are only one category apart on an ordinal scale. Such discrepancies may be due to different interpretations of the response categories. What a mother views as "one to three times a month," a father may view as "about once a week." In other cases the discrepancies are greater. Such instances are indicated by low ordinal kappa statistics, which give higher weight to larger discrepancies. The contrast between mother- and father-reports is greatest when financial contributions are considered. Mothers consistently underreport fathers' participation in financial endeavors for the child - relative to the nonresident fathers' reports. Because the response scale for these questions is yes or no, it is less likely that mothers' and fathers' interpretations of the response categories overlap. If mothers and fathers do have differing interpretations, this suggests a need to alter and improve data collection from one or both parents. Such strategies are discussed in Chapter 8. First, the question of whether or not the discrepancies in

mother- and nonresident father-reports affect analysis of the relationship between nonresident father involvement and child well-being is addressed in the next chapter.

CHAPTER 7 : DO DISCREPANCIES IN REPORTS AFFECT PARAMETER ESTIMATES?

Chapter 1 noted that most research regarding nonresident father involvement and child welfare uses mothers', not fathers', reports of nonresident fathers' characteristics and behavior. Chapter 6 confirmed that mothers report the level and nature of nonresident father involvement with their children differently than fathers. How do these differences change the estimated relationship between nonresident father involvement and child well-being? This chapter addresses this question by regressing nonresident father involvement on child well-being using mother-reported data, father-reported data, and both.

DEPENDENT VARIABLES

"Child well-being" can refer to many aspects of a child's health and welfare. Well-being can refer to the state of relationships with others, physical and mental health, or scholastic aptitude, achievement, and attainment. Drawing on the measures available in the PSID CDS, and consistent with related literature, this analysis focuses on emotional child well-being and scholastic well-being. Two measures are used to assess emotional well-being: the Positive Behavior Scale and the Behavioral Problems Index. The Woodcock-Johnson Revised Tests of Achievement for children age three and older are used to assess scholastic well-being.

The Positive Behavior Scale

The Positive Behavior Scale measures the positive aspects of children's behavior for children over the age of three. The scale used in the PSID-CDS consists of 10 items measured on a 5-point Likert scale where 1 means "not at all like my child," and 5 means "totally like my

child." Summing scores on the raw items generates a score that ranges from 10 to 50. The higher the score, the more positive the child's behavior. There were three cases of item nonresponse on the questions that comprise the PBI. In order to maintain sample size, missing values were imputed using a child's score on the other nine questions, along with his or her age and race. A more complete description of the PBI is provided in Appendix B.

The Behavior Problems Index

The Behavior Problems Index measures the incidence and severity of child behavior problems. To generate the Index, the PSID CDS asked the primary caregiver 30 behavior-related questions of children 3 years and older, measured on a 3-point Likert scale (1 = not true, 2 = sometimes true, and 3 = often true). Summing scores on the raw items generates scores ranging from zero to 90. A higher score indicates more problematic behavior. Of the 251 child-households with a nonresident father respondent, 212 children were eligible for a BPI interview but seven children were missing the BPI Total Composite Score. Scores were imputed in each of these cases. Appendix B contains a complete description of the questions are included in the Index and well as imputation procedures.

It is important to point out that the Positive Behavior Scale and Behavior Problems Index rely on mothers' reports of their children's behavior. Any systematic reporting differences by the mother's or child's race, the child's sex, etc., will affect the coefficients of these control variables in the regression. The fact that mothers report the dependent and independent variables may increase associations due to shared method variance.

The Woodcock-Johnson-Revised Tests of Achievement

The Woodcock-Johnson-Revised Tests of Achievement are used to evaluate scholastic aptitude in reading and math. The broad math score for children ages 6 to 12 and a measure of reading ability/readiness for children ages 3 to 12 are used as dependent variables here. Both tests are norm-referenced (performance is compared to a national sample representing a diverse cross-section of students) with a population mean of 100 and standard deviation of 15 points. Broad math scores are available for 116 of 149 eligible children. Reading ability/readiness scores are available for 164 of 212 eligible children. No attempt was made to impute missing data. Children with missing data are omitted from the analysis.

INDEPENDENT VARIABLES

Two categories of independent variables are included in the regressions presented here, control variables and nonresident father characteristics/behavior variables. Control variables consist of child characteristics (gender, race, birth status, learning disability status), household characteristics (single-parent household, poverty status, HOME score, child support receipt, and time since father lived with the child), and the time between the mother's and father's interview. A complete description of these control variables can be found in Appendix B.

The focus of the analysis is the variables associated with nonresident father characteristics and involvement. Two dummy variables measure father characteristics: whether or not he is married, and whether or not he has children other than those he had with the mother.

Father involvement is measured in three ways. First, the measure of contact frequency described and analyzed in the previous chapter is used here. This variable is ordinal and consists of five categories: 0 = Never, 1 = About once a year, 2 = Several times a year, 3 = 1-3 times per month, and 4 = More than once a week.[33]

Second, absent father interaction with the child is measured by combining answers about father-child activities into one score in which a higher score indicates more types of involvement. The subquestions combined are:

Questions Combined: Father-Child Interaction	**Measurement Scale**
How often does father spend time w/child in:	
1. Leisure activities such as picnics, movies, sports, or visiting family friends?	1 = Not at all 2 = About once a year 3 = Several times a year 4 = 1-3 times a month 5 = About once a week 6 = Several times a week
2. Religious activities?	
3. Talking, working on a project, or playing together?	Combined Variable Minimum Value = 4 Maximum Value = 24
4. School or other organized activities?	

Finally, absent father expenditures on the child are measured by combining answers to six questions regarding nonresident father financial contributions into one score where a higher score indicate more types of contributions. The subquestions combined are:

[33] Ideally these categories would enter the regression as dummy variables with "never" being the omitted category. While this approach works for analysis of mothers' reports, skip patterns in the fathers' questionaire cause perfect collinearity between categories one and two and some measures of father involvement. Therefore the ordinal variable is included in the regression. The coefficient on this variable is the average effect over all categories of contact. Inclusion of the variable in this manner requires an assumption of a linear effect across categories. While this assumption is debatable, it is a necessary due to the nature of the survey instruments developed for the CDS.

Questions Combined: Fathers' Expenditures	Measurement Scale
Has father..... for the child in the last year?	0 = No 1 = Yes
1 Bought clothes, toys, or presents	
2 Paid for camp or lessons?	
3 Taken the child on vacation?	Combined
4 Paid for dental or uninsured medical expenses?	Min Value = 0
5 Paid for child's medical insurance?	Max Value = 6
6 Any other things? (SPECIFY)	

The mother's assessment of whether or not the father pays child support is included as a control variable, but is not a focus of this analysis because fathers were not asked about child support payments in the PSID CDS.

One measure of interparental conflict is included in the model. Interparental conflict is measured by combining answers on the question about conflict on different issues into one score in which a higher score indicates less conflict.[34] The subquestions combined are:

Questions Combined: Interparental Conflict	Measurement Scale
Do you have conflict over:	1 = Often 2 = Sometimes 3 = Hardly Ever 4 = Never
1. Where the child lives?	
2. How child is raised?	
3. Disciplining the child?	Combined
4. How you spend money on child?	Min Value = 4
5. Child's visits with his/her father?	Max Value = 20

The choice of independent variables is informed by previously reviewed research and by considerations of statistical power. Power to detect statistically significant differences is low in this analysis for four reasons. First, adjusting the sample weights for nonresponse introduces a design effect that diminishes the effective sample size in

this analysis from 251 to 108 observations. Second, the number of observations available for analysis is reduced because some questions were only asked of a subset of mothers and/or nonresident fathers (see Chapter 6). In order to ensure that the coefficients are comparable, regressions are run on child households in which both the skip patterns for the mother and the skip patterns for the father apply. Third, after preliminary post-estimation diagnostics indicated that the children of widowed heads-of-household had higher-than-average residuals and exerted higher-than-average leverage on the regression, these four observations were omitted from analysis. Fourth, the number of eligible children varies with the test and age of the child - further limiting sample size.

In combination, these four factors reduce the effective sample size and statistical power available for analysis. As such, if analysis of pairwise correlations between independent variables indicated a statistically significant relationship with a magnitude greater than $|0.40|$, only one of the variables analyzed was included in the analysis. For example, father-child interaction is included in the model, but mothers' and fathers' assessment of a father's influence in child-rearing is not because the variables are highly correlated. The former is included because research indicates that the quality of the father-child interaction is important when evaluating child well-being (Amato and Gilbreth, 1999). Post-estimation analysis of variance inflation factors (VIF) indicates that the average VIF for each regression does not exceed 2.0 and no included variable has a VIF of greater than 4.0.[35]

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[34] For this and previous combined measures, summing the values for each subquestion assumes that each subquestion deserves equal weight in the computation of a summary score. In all cases "don't know" was recoded as missing.

[35] A variance inflation factor which exceeds 10 is considered to be a sign of multicollinearity, as is an average VIF which is considerably larger than 1 (STATA Reference Manual, Release 5, Vol. 1, A-F, p. 390).

Test statistics reported account for the increased variance associated with the use of sample weights.

DESCRIPTION OF REGRESSION ANALYSIS

Three different regression models are used to examine the relationship between reporting discrepancies and variations in child well-being.

Regression Approach 1: The Basic Model

After preliminary post-estimation diagnostics produced no evidence of nonlinearities, the basic model used for analysis is:

$$Y_i = \beta_0 + \beta_{1i}\text{ChSex} + \beta_{2i}\text{ChRace} + \beta_{3i}\text{ChPremie or LearningDis.} + \beta_{4i}\text{Poverty} + \beta_{5i}\text{HOME2} + \beta_{6i}\text{Single Mother} + \beta_{7i}\text{ChildSupport} + \beta_{8i}\text{Time Since Sep.} + \beta_{9i}\text{Time BetweenInterviews} + \beta_{10i}\text{FMarried} + \beta_{11i}\text{FOthChild} + \beta_{12i}\text{FVisitFreq} + \beta_{13i}\text{FCInteract} + \beta_{14i}\text{FExpend} + \beta_{15i}\text{Conflict} + \varepsilon_i$$

This model is run on mother-reported data for each of the four measures of child well-being: the Positive Behavior Index (PBI), the Behavior Problems Index (BPI), the Woodcock Johnson Reading Score, and the Woodcock Johnson Broad Math Score. The output associated with each of these regressions is considered the "base case," or basis for comparison with father-reported data. Next, the model is run on father-reported data for each of the measures of child well-being. The goal of running the exact same model on mother-reported data and again on father-reported data is to determine if parameter estimates vary with the reporting party. If they do, this indicates that research and policy conclusions derived from these estimates will also vary with the reporting party.

Regression Approach 2: The Basic Model Plus Indicators of Discrepancy

If parameter estimates change when fathers are respondents and mothers are respondents, this begs the question: Is the variation in child well-being better explained by mothers' reports or fathers' reports? To answer this question, the basic model is augmented with two dummy variables and regressed on each of the four dependent variables for a third time. Each dummy variable indicates the presence of a discrepancy between mothers' and fathers' reports for a father characteristic or behavior variable. One dummy variable equals "1" if the father's report is greater than the mother's. The other dummy variable equals "1" if the father's report is less than the mother's. Both dummy variables equal zero if there is no discrepancy. There are six pairs of these dummy variables: one pair dealing with fathers' marital status, one dealing with fathers' other children, one dealing with frequency of contact, one for father-child interactions, one for fathers' expenditures, and one for interparental conflict. Each pair of dummies is introduced along with the mothers' reports of the corresponding variable in a sequential manner. The model is as follows:

$$Y_i = \beta_0 + \beta_{1i}\text{ChSex} + \beta_{2i}\text{ChRace} + \beta_{3i}\text{ChPremie or LearningDis.} + \beta_{4i}\text{Poverty} + \beta_{5i}\text{HOME2} + \beta_{6i}\text{Single Mother} + \beta_{7i}\text{ChildSupport} + \beta_{8i}\text{Time Since Sep.} + \beta_{9i}\text{Time BetweenInterviews} + \beta_{10i}\text{FMarried} + \beta_{11i}\text{FOthChild} + \beta_{12}\text{FVisitFreq} + \beta_{13i}\text{FCInteract} + \beta_{14i}\text{FExpend} + \beta_{15i}\text{Conflict} + \beta_{16i}(\text{F report} > \text{M report}) + \beta_{17i}(\text{F report} < \text{M report}) + \varepsilon_i$$

The purpose of this approach is to determine the circumstances in which discepancies in reports should concern researchers. Clearly, if there is no discrepancy between the reports then mothers are perfect proxy reporters for fathers. However, if fathers' reports make a contribution to understanding the variation in child well-being once mothers' reports are taken into account, one would expect either one or

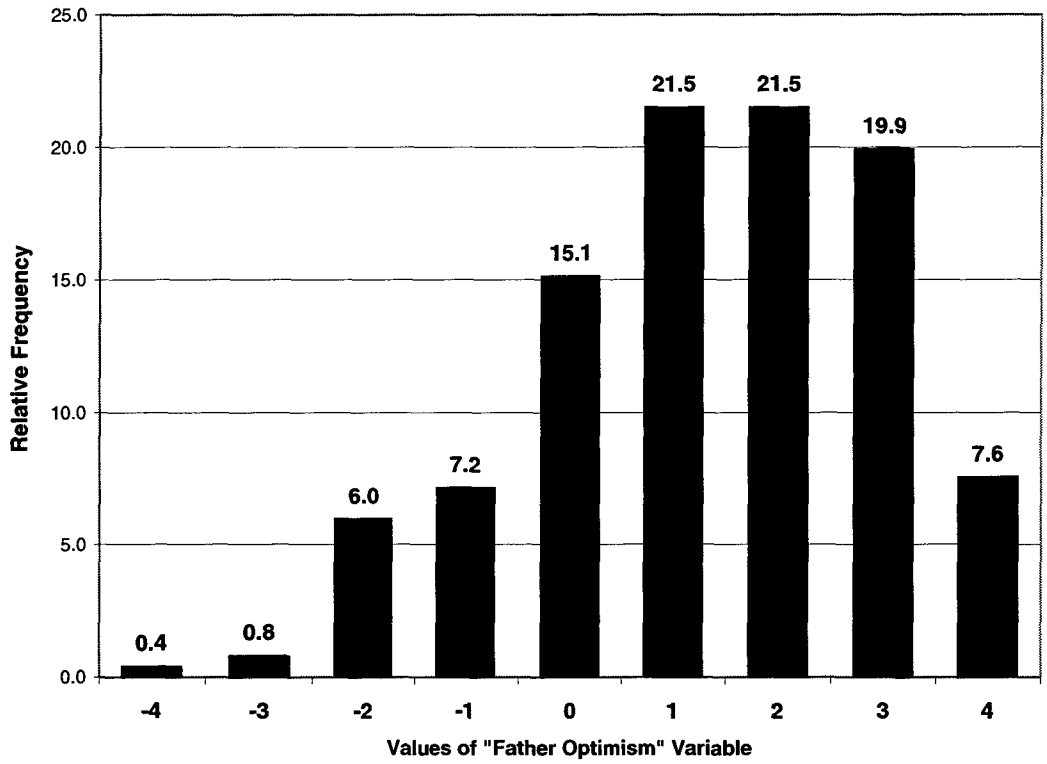
both of the dummy variables to be statistically significant. The coefficient on a statistically significant dummy variable indicates the magnitude and direction of the relationship between the type of discrepancy and child well-being.

Regression Approach 3: The Basic Model Plus "Father Optimism"

Preliminary analysis using dummy variables suggests that the presence of a discrepancy between parents' reports reflects some unobserved characteristic such as the father's satisfaction with his nonresident status or with the interparental relationship. To further analyze this finding, a new variable called "father optimism" was generated. This variable, constructed from four variables that measure the extent of the interparental discrepancy, takes on the values -4, -3, -2, -1, 0, 1, 2, 3, 4. A value of (-4) indicates that the father underreported contact frequency, expenditure, engagement, and interparental conflict relative to the mother. By contrast a value of (4) indicates that the father overreported all of these variables relative to the mother. A value of zero indicates that both parents agreed when reporting all four of these variables. For the vast majority of couples (70.5 percent), noncustodial fathers report more involvement with their children than mothers, compared to 14.4 percent of fathers reporting less involvement. This lends support to the need for a third regression approach.

The variable is termed "father optimism" for two reasons. First, the relative frequency distribution of this variable in Figure 7-1 indicates that fathers tend to overreport relative to mothers. This suggests that fathers view and report their behavior in a manner that reflects more contributions and engagement, and less conflict on their

Figure 7-1: Relative Frequency Distribution of "Father Optimism" Variable



part. Second, while the variable could be termed "mother pessimism," it seems more likely that fathers overreport relative mothers (whether accurate or not) because, as the nonresident parent, they have more at stake in evaluating their own parenting activities.

Regression output for all three analytic approaches is reported in table 7-3 through 7-6. Gray shaded cells indicate measures nonresident fathers' characteristics or behaviors.

Table 7-3: Impact of Using Mother- v. Father-Reported Data on Regression Parameter Estimates: PBI

		Mothers' reports	Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	-0.13	-0.43	-0.33	-0.15	-0.36	-0.06	-0.58	-0.20	-0.12
	Child is Nonwhite	5.01***	4.83***	5.09***	4.96***	4.84***	5.51***	5.19***	5.01***	5.02***
	Child was Premie	-0.22	-0.45	-0.41	-0.36	-0.29	-0.41	-0.13	-0.31	-0.22
	Single Mother	0.45	0.79	0.72	0.43	0.11	0.22	1.47	0.32	0.43
	HH in Poverty	-1.02	-1.07	-1.25	-1.03	-0.86	-1.11	-0.83	-1.10	-0.94
	HOME2 Score	0.26	0.38	0.28	0.28	0.27	0.24	0.42	0.25	0.25
	Mother receives child support	1.10	0.73	1.27	1.10	0.80	1.21	0.69	1.28	1.04
	Time since father lived w/child	0.02	0.02[1]	0.02*	0.02	0.02[1]	0.02	0.02	0.02	0.02
	Time between mother's and father's interview	-0.03*	-0.03**	-0.02*	-0.03**	-0.02**	-0.03**	-0.02**	-0.03*	-0.03**
Father Variables	Father is Married	0.29	-1.03	-0.40	0.31	0.14	0.56	-0.22	0.32	0.26
	Father Has Other Children	-0.47	0.94	-0.25	-0.36	-0.33	-0.33	0.09	-0.47	-0.47
	Father Contact Frequency	-0.11	2.49*	0.03	-0.13	1.27	0.17	-0.14	0.01	0.01
	Father-Child Interaction	-0.09	-0.25	-0.10	-0.10	-0.11	-0.09	-0.09	-0.08	-0.08
	Father Expenditure	0.19	0.36	0.23	0.20	0.20	0.31	0.00	0.18	0.21
	Interparental Conflict	0.31**	0.15	0.31**	0.30**	0.33**	0.28**	0.35**	0.39*	0.32**
Discrepant Cases	Father is married, but mother says not			-2.16*						
	Father is not married, but mother says yes			1.25						
	Father has other kids, but mother says not				1.06					
	Father no other kids, but mother says yes				2.37					
	Father reports more contact than mom					2.40				
	Father reports less contact than mom					-0.95				
	Father reports more interaction than mom						-1.89			
	Father reports less interaction than mom						-2.33			
	Father reports more expenditures than mom							-2.79**		
	Father reports less expenditures than mom							-4.63**		
	Father reports less conflict than mom								1.47	
	Father reports more conflict than mom								0.84	
	Father optimism									0.09
	Constant	28.59***	21.93***	27.79***	28.70***	23.30***	29.89***	26.14***	25.77***	27.89***
	R^2	0.32	0.31	0.34	0.33	0.33	0.33	0.33	0.33	0.32
	Partial F-test (p-value)			0.18	0.65	0.40	0.42	0.00	0.75	
	n	138	138	138	138	138	138	138	138	138

Note: Statistical significance evaluated using t-tests of the parameter estimate.
* statistically significant at $p \leq 0.10$; ** at $p \leq 0.05$; *** at $p \leq 0.001$; [1] at $p \leq 0.11$

Table 7-4: Impact of Using Mother- v. Father-Reported Data on Regression Parameter Estimates: BPI

		Mothers' reports	Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	1.33	2.21	1.52	1.28	2.49	1.00	1.67	1.56	1.27
	Child is Nonwhite	-5.08**	-5.94**	-5.25**	-5.06**	-4.57**	-6.02**	-5.29**	-5.08**	-5.08**
	Child was Premie	2.06	0.74	2.94	2.14	2.55	2.36	1.75	2.24	2.13
	Single Mother	-6.58**	-6.38*	7.01**	-6.62**	-4.39**	-6.17**	-6.32**	-6.26**	-6.34**
	HH in Poverty	5.37**	4.50*	5.18**	5.34**	4.54**	5.39*	5.23**	5.62**	4.27**
	HOME2 Score	-1.31**	-1.43**	-1.42**	-1.32**	-1.33***	-1.27**	-1.25**	-1.30**	-1.22**
	Mother receives child support	-3.71	-2.65	5.10*	-3.62	-1.73	-3.78	-3.10	-4.10[1]	-2.90
	Time since father lived w/child	-0.03	-0.05*	-0.03	-0.02	-0.03	-0.02	-0.03	-0.02	-0.03
	Time between mother's and father's interview	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02
Father Variables	Father is Married	0.35	3.51*	3.86	0.22	0.79	-0.10	0.76	0.28	0.74
	Father Has Other Children	-2.81	-3.83	-5.00**	-2.66	-2.77	-3.06	-3.12	-2.85	-2.77
	Father Contact Frequency	0.10	-7.61**	-0.22	0.16	-5.16**	-0.33	0.13	-0.11	-1.17
	Father-Child Interaction	0.54**	0.60**	0.56**	0.55**	0.63**	-0.49**	0.46*	0.51*	0.41*
	Father Expenditure	0.64	-1.23[1]	0.32	0.63	0.66	0.42	0.11	0.66	0.33
	Interparental Conflict	-1.04***	-0.20	-1.00***	-1.03***	-1.05***	-0.97**	-1.00***	-1.21***	-1.20***
Discrepant Cases	Father is married, but mother says not			3.92[1]						
	Father is not married, but mother says yes			-13.88***						
	Father has other kids, but mother says not				-0.46					
	Father no other kids, but mother says yes				-4.16					
	Father reports more contact than mom					-8.68**				
	Father reports less contact than mom					8.46**				
	Father reports more interaction than mom						3.06			
	Father reports less interaction than mom						4.60			
	Father reports more expenditures than mom							-2.73		
	Father reports less expenditures than mom							0.55		
	Father reports less conflict than mom								-3.53	
	Father reports more conflict than mom								-2.27	
	Father optimism									-1.30**
	Constant	88.29***	105.98***	91.99***	88.22***	103.92***	86.09***	89.56***	94.48	97.64***
	R^2	0.47	0.38	0.51	0.47	0.54	0.48	0.48	0.48	0.49
	Partial F-test (p-value)			0.00	0.79	0.00	0.23	0.31	0.51	
	n	138	138	138	138	138	138	138	138	138

Note: Statistical significance evaluated using t-tests of the parameter estimate.
* statistically significant at $p \leq 0.10$; ** at $p \leq 0.05$; *** at $p \leq 0.001$; [1] at $p \leq 0.11$

Table 7-5: Impact of Using Mother- v. Father-Reported Data on Parameter Estimates: Reading Score, Ages 3-12

		Mothers' reports	Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	-7.15*	-7.72**	-6.04	-7.01 [1]	-8.19**	-7.41 [1]	-7.03	-6.13	-6.79
	Child is Nonwhite	5.70	6.68*	5.42	5.91	2.29	6.05	5.57	3.85	4.75
	Child was Premie	-25.75***	-18.05***	-27.21***	-25.84***	-23.98***	-25.48***	-25.60***	-25.01***	-25.16***
	Single Mother	1.73	-1.05	0.23	2.50	-1.38	2.21	2.52	-0.92	0.59
	HH in Poverty	-2.99	3.22	-1.63	-2.49	-2.62	-4.35	-2.77	-3.53	-1.14
	HOME2 Score	1.86**	1.15*	1.70**	1.86**	2.23**	1.91**	1.86**	1.39	1.54*
	Mother receives child support	2.12	6.98*	1.84	1.22	1.91	3.43	1.39	5.86	1.19
	Time since father lived w/child	-0.04	-0.86*	-0.05	-0.03	0.03	-0.05	-0.04	-0.06	-0.03
	Time between mother's and father's interview	0.12*	0.12*	0.09	0.12*	0.10	0.12*	0.12*	0.14**	0.13*
Father Variables	Father is Married	-2.45	3.23	0.00	-1.65	-4.59	-2.50	-3.15	-2.50	-2.80
	Father Has Other Children	-0.45	-4.38	-1.54	-2.19	2.18	-0.40	-0.14	-0.52	-1.34
	Father Contact Frequency	-9.28**	12.32**	-9.74***	-9.35**	3.45	-8.25**	-9.28**	-6.64**	-7.38**
	Father-Child Interaction	0.36	-1.57**	0.22	0.38	0.49	-0.06	-0.43	-0.63	0.61
	Father Expenditure	3.37**	4.28**	3.27**	3.38*	3.17**	3.36*	3.69**	2.82**	3.80**
	Interparental Conflict	-1.47**	1.41***	-1.57**	-1.45**	0.95**	-1.46**	-1.46**	-0.00	-1.14**
Discrepant Cases	Father is married, but mother says not			11.60**						
	Father is not married, but mother says yes			-0.54						
	Father has other kids, but mother says not				-4.14					
	Father no other kids, but mother says yes				-7.43					
	Father reports more contact than mom					23.90**				
	Father reports less contact than mom					2.36				
	Father reports more interaction than mom						-4.04			
	Father reports less interaction than mom						1.92			
	Father reports more expenditures than mom							-0.22		
	Father reports less expenditures than mom							-5.52		
	Father reports less conflict than mom								19.61***	
	Father reports more conflict than mom								7.08	
	Father optimism									2.07
	Constant	118.35***	14.48	126.59***	116.71***	53.23**	118.26***	116.36***	75.95***	105.19***
	R^2	0.49	0.53	0.53	0.50	0.55	0.51	0.50	0.57	0.50
	Partial F-test (p-value)			0.08	0.61	0.01	0.40	0.54	0.00	
	n	110	110	110	110	110	110	110	110	110

Note: Statistical significance evaluated using t-tests of the parameter estimate.
* statistically significant at $p \leq 0.10$; ** at $p \leq 0.05$; *** at $p \leq 0.001$; [1] at $p \leq 0.11$

Table 7-6: Impact of Using Mother- v. Father-Reported Data on Regression Estimates: Math Score, Ages 6-12

		Mothers' reports	Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	-12.70***	-14.52***	-12.47**	-12.69***	-13.54***	-13.32***	-13.06***	-14.40***	-12.98***
	Child is Nonwhite	-8.05*	-2.91	-7.27	-8.35*	-10.41**	-8.04*	-8.29*	-9.87**	-7.81*
	Child was Premie	-30.72***	-24.45***	-30.27***	-30.90***	-29.34***	-29.05***	-30.72***	-30.12***	-30.44***
	Single Mother	6.35	2.92	7.03	6.89	4.47	7.24	6.21	5.04	6.59
	HH in Poverty	-10.38**	-11.71**	-10.46**	-9.92**	-9.65**	-12.33**	-10.40**	-12.03**	-11.26**
	HOME2 Score	0.16	-0.48	-0.02	-0.16	0.12	-0.05	-0.25	0.07	-0.05
	Mother receives child support	5.06	2.69	6.39	4.65	5.69	5.07	5.01	4.41	4.68
	Time since father lived w/child	-0.08*	0.03	-0.08	-0.07*	-0.08*	-0.10*	-0.07	-0.08 [1]	-0.08**
	Time between mother's and father's interview	0.01	0.02	0.02	0.01	0.01	0.00	0.01	-0.00	0.01
Father Variables	Father is Married	-12.43**	-7.06*	-16.08**	-11.52**	-14.09**	-13.47**	-12.67**	-12.35*	-12.14**
	Father Has Other Children	-3.61	-4.95	-0.57	-5.33	-1.33	-2.31	-3.54	-3.56	-3.64
	Father Contact Frequency	-3.95	3.70	-3.03	-4.03	3.76	4.26	-4.07	-5.81*	-4.67
	Father-Child Interaction	-0.56	-1.63**	0.68	-0.56	-0.46	-1.07	-0.48	-0.21	-0.68
	Father Expenditure	2.84*	3.53**	3.39**	2.76*	2.57*	2.67*	3.11**	2.19	2.67*
	Interparental Conflict	1.12*	0.05	1.09*	1.18**	1.64**	1.01*	1.15*	1.43**	0.96
Discrepant Cases	Father is married, but mother says not			-3.41						
	Father is not married, but mother says yes			13.49						
	Father has other kids, but mother says not				-2.64					
	Father no other kids, but mother says yes				12.62*					
	Father reports more contact than mom					13.36*				
	Father reports less contact than mom					1.58				
	Father reports more interaction than mom						7.12			
	Father reports less interaction than mom						16.03**			
	Father reports more expenditures than mom							1.90		
	Father reports less expenditures than mom							-0.30		
	Father reports less conflict than mom								6.34	
	Father reports more conflict than mom								8.47 [1]	
	Father optimism									-0.70
	Constant	115.30***	126.71***	107.48***	114.31***	71.35**	113.42***	114.21	106.84***	122.05***
	R^2	0.64	0.60	0.65	0.65	0.66	0.65	0.64	0.65	0.64
	Partial F-test (p-value)			0.29	0.26	0.16	0.02	0.93	0.24	
	n	82	82	82	82	82	82	82	82	82

Note: Statistical significance evaluated using t-tests of the parameter estimate.

* statistically significant at $p \leq 0.10$; ** at $p \leq 0.05$; *** at $p \leq 0.001$; [1] at $p \leq 0.11$

IMPACT OF USING MOTHER- V. FATHER-REPORTED DATA

The first two columns of tables 7-3 through 7-6 describe the effect of using mother- versus father-reported data to estimate the relationship between nonresident father involvement and child well-being. For each dependent variable, the first column of regression results contains parameters estimates obtained using mother-reported data only. The second column contains estimates obtained using mothers' reports for all control variables and fathers' reports of the main explanatory variables. Results indicate that parameter estimates do vary with the reporting party. As a result, researchers and policymakers will come to different conclusions depending on which set of estimates they examine: those using mothers' reports or those using fathers' reports.

Three main themes summarize the differences between the regressions that use mothers' reports and those that use fathers' reports 1) estimates of the association between frequency of contact and child well-being differ dramatically depending on whose reports are used; 2) the statistical significance, magnitude, and/or sign of coefficients associated with other aspects of father involvement differ between regressions; and 3) model fit differs between regressions.

Theme 1: The association between frequency of contact and child well-being differs depending on whose reports are used.

One of the most striking differences in parameter estimates between mothers' reports and fathers' reports has to do with the relationship between father-child contact frequency and child well-being. Chapter 2 noted that studies tend to find small and/or statistically insignificant effects of nonresident father visitation frequency. "Overall, the social science research appears to indicate that nonresident fathers are important for their money, but for very

little else (Amato, 1998)." The regression results presented here suggest that this may be due, in part, to the fact that mothers' reports, and not fathers' reports, are generally used in analysis.

With respect to emotional well-being, mothers' reports suggest that father-child contact is not associated with child well-being. In contrast, fathers' reports suggest that increased contact is significantly associated with better behavior, as measured by an increase in the PBI score and a decrease in the BPI Total Score. In the case of scholastic well-being, both the direction and magnitude of the relationship between contact frequency and reading scores change. Using mother-reported data, greater contact is associated with lower reading scores (approx. 9 points, 60% of a standard deviation). In sharp contrast, father-reported data shows that increased contact is associated with higher reading scores (approx. 13 points, or 87% of a standard deviation). A researcher or policymaker examining findings based only on mothers' reports would conclude that frequency of contact is not associated with behavioral outcomes and negatively associated with reading outcomes. A researcher or policymaker examining findings based on fathers' reports would conclude the opposite, that increased contact is associated with better behavioral and reading outcomes.

Theme 2: The statistical significance and/or magnitude of coefficients associated with father involvement differ between regressions.

In addition to the notable differences associated with frequency of contact, a frequently occuring trend is for some variables to change from insignificant to statistically significant correlates of child well-being - or visa versa.

Fathers' marital status

Coefficients on fathers' marital status change in the regression on the BPI Total Scores between mothers' and fathers' reports. Looking only at the regression of mother-reported data, one would conclude that if an absent father is married, the surveyed child is no more or less likely to have behavior problems. By contrast, fathers' reports suggest that children with (re)married absent fathers have greater behavior problems. Analysis of math scores indicate that fathers' (re)marriage is associated with lower test scores. The evidence to support this conclusion is weaker with father-reported data.

Fathers' other child status

All eight regressions show no relationship between child well-being and fathers' other child status. It appears that knowing if the nonresident father has children other than those he had with the surveyed mother does not help explain any variation in child well-being.

Father-child interaction

Conclusions regarding the relationship between father-child interaction and behavioral outcomes are mixed. When fathers' reports are used, increases in the types of interaction are associated with better behavior but the magnitude of the coefficients is quite small. The same is true when mothers' reports are used. While this implies a positive effect of more interaction, more engagement is not associated with scholastic outcomes when mothers' reports are considered, but are negatively associated with outcomes when fathers' reports are used.

Fathers' financial contributions

Looking only at the regression using mother-reported data, one would conclude that if an absent father makes greater types of financial contributions, the surveyed child is no more or less likely to have

behavior problems. By contrast, when fathers' reports are used there is some evidence to suggest that increased types of expenditures are associated with fewer behavior problems as measured by the BPI. Coefficients associated with scholastic well-being also suggest a positive relationship. Both parents' reports suggest that increased types of financial contributions are associated with higher test scores, but the magnitude of the relationship is greater when fathers' reports are used. The relationship is also more statistically significant with respect to math scores when fathers' reports are used.

A similar pattern of differing conclusions emerges with respect to child support receipt and reading readiness. In all cases, the mother reports this variable. It measures whether or not the mother was a "child support receiver" the year that the survey was administered. When this variable is included in analysis using mother-reported data, there is no association between child support receipt and reading ability. By contrast, when included with fathers' reports on other variables, child support receipt is significantly associated with higher reading scores (approximately 7 points, or 47% of standard deviation).

Interparental conflict

Finally, a statistically significant positive association exists between interparental conflict and emotional well-being when mothers' reports are used. Less conflict is associated with better behavior. No such relationship exists when fathers' reports are used. By contrast, there is a positive association between fathers' reports of interparental conflict and reading scores for children ages 3-12. In this instance less interparental conflict is associated with lower reading scores when mothers' reports are used.

Whereas mother-reported data reflects a positive association between less conflict and math scores. Father-reported data reflects no such relationship.

Control variables

Estimates of the effects of control variables remain stable regardless of whose reports are used. For example, there is a consistent strong negative association between being female and scholastic test scores. There is also a consistent strong negative association between learning disabilities and any scholastic indicator. Results also indicate that children that live in impoverished households exhibit more behavior problems and lower math scores. Those children in households that score higher on the home environment scale have fewer behavior problems and higher reading scores. Finally, it appears that nonwhite children consistently have fewer behavior problems. While this may be true, this finding may also reflect cultural differences in reporting behavior by mothers.

Theme #3: Model fit differs between regressions.

In most instances the model used better fits mother-reported data and in one instance it better fits father-reported data. There is a slight increase in the R^2 when father-reported data are used to evaluate reading scores. There is a slight decrease when father-reported data are used to evaluate the other dependent variables. The changes in the R^2 are not particularly large and do not provide consistent guidance as to which reports are truly a better fit.

ANALYSIS OF TYPES OF DISCREPANCIES

The first two columns of each table indicate that some parameter estimates vary with the reporting party. This indicates that it would be worthwhile to 1) collect higher-quality reports from nonresident fathers and reestimate and reevaluate the parameters examined here; and 2) incorporate fathers' reports into analysis of families that are likely to experience reporting discrepancies. A stronger argument for collecting and analyzing information on fathers comes from the analysis of dummy variables indicating the presence of discrepancies. Clearly, if there is no discrepancy between the reports then mothers are perfect proxy reporters for fathers. However, if fathers' reports make a contribution to understanding the variation in child well-being once mothers' reports are taken into account, one would expect either one or both of the dummy variables to be statistically significant. The coefficient on a statistically significant dummy variable indicates the magnitude and direction of the relationship between the type of discrepancy and child well-being.

Discrepancies regarding father's marital status

Results indicate that misreports regarding fathers' marital status occur in cases where child well-being differs from cases of correct reports. Specifically, analysis of the PBI and the BPI shows that children whose mothers erroneously believe the father is not married have poorer behavior outcomes. By contrast, these children tend to have better reading scores. While these results may seem contradictory, it may be that the unobserved characteristic being captured by the discrepancy affects behavioral and scholastic outcomes differently.

Analysis of the BPI also shows that children whose mothers report the father as married when he is not, tend to have better behavior outcomes. This type of discrepancy does not inform understanding of scholastic well-being.

Clearly the relationship between the type of discrepancy and child outcomes are not causal; rather, they indicate an ability explain more variation in child well-being if we know about the presence and type of discrepancy. The "backstory" is unclear, but these results suggest that one exists. For example, it may be that fathers who are married must divide their attention between the child and a spouse. Mothers may not know of this, but perhaps the child does, or it comes through in the fathers' interest and interactions with the child. Perhaps children feel upset or threaten by the presence of a stepparent. Whatever the means, it appears to have a negative impact on children's behavioral outcomes. In short, there appears to be an unobserved and unmeasured characteristic or set of characteristics that explain the relationship between the dummy variable and child well-being. This indicates a need to enhance data collection instruments to better capture this phenomena.

The direction, magnitude, and level of statistical significance of findings associated with discrepant reporting of marital status are consistent if mothers' reports or fathers' reports of the father variables are used.

Discrepancies regarding father's other-child status

Although Chapter 6 showed that mothers are much more likely to erroneously report other child status than erroneously report marital status, the results in table 7-4 suggest that the presence of such a discrepancy is not particularly informative. Knowing that the mother

erroneously reported the father's other child status does not help explain variation in child well-being, with the exception of math scores. There is some evidence to suggest that if the mother thinks the father has other children, but he does not, the surveyed child is likely to score higher on the math test. While the magnitude of this relationship is sizable (on the order of about one standard deviation), evidence is weak because the p-value is high ($p = 0.099$) and an F-test indicates that the null hypothesis that both dummy variable coefficients are zero cannot be rejected.

However, analysis contained in Appendix C lends support to the finding misreports of other child status are associated with different types of child outcomes. When fathers' reports of the "father variables" are used, if the mother mistakenly thinks that father doesn't have other children, surveyed children have poorer behavioral outcomes as measured by the BPI ($\beta = 5.56$, $p = 0.05$). This discrepancy may, in fact, be capturing information about the father's availability to the child or his sense of responsibility toward children. Nonresident fathers who have other children the mother doesn't know about may be less available and/or less responsible than their peers.

Discrepancies regarding frequency of contact

With respect to frequency of contact we see that in cases where fathers report more contact than mothers, children have better behavioral outcomes, better reading scores, and better math scores. By contrast, in cases where fathers report less contact, children have poorer behavioral outcomes. What might be going on here? Perhaps fathers are reporting not only frequency of contact but indirectly their satisfaction with their contact with the child. Recall from Chapter 6 that mothers and fathers frequently experienced discrepancies regarding

contact frequency of only one category. Because the response categories for this variable rely on the use of vague quantifiers, it may be that most parents agree on actual frequency but the response categories inadvertantly capture constructs such as "satisfaction with contact frequency." For example, a father who usually visits every Saturday, infrequently skips a week, and is pleased with this arrangement may indicate he sees the child once a week. The mother might indicate 1-3 times a month. If this is true, the fact that children whose fathers report more contact tend to have better outcomes may indicate that these are cases where fathers are more satisfied with their contact/contact arrangement. Again, this is a case of omitted variable bias and suggests the need to refine data collection instruments to capture the omitted construct.

One could argue that nonresident fathers tend to have more contact with better-behaved, high-achieving children, meaning that the child's disposition/character influences father contact. While this dynamic may be true, this is not the appropriate interpretation of these results. If this were correct, one would expect mothers and fathers to agree on the frequency of contact for such children. Instead, the presence of a discrepancy suggests the father is reporting something the mother is not - perhaps satisfaction, optimism, etc.

When the frequency of contact discrepancies are analyzed in conjunction with fathers' reports of the father variables, results are somewhat consistent with the findings regarding reading scores. Overreports by fathers are associated with higher reading scores, but the same is true for underreports ($\beta_{f>m}$= 15.84, p= 0.00; $\beta_{f<m}$= 14.51, p = 0.07). It appears that, in conjunction with fathers' reports of his characteristics, any discrepancy regarding frequency of contact is associated with higher-achieving children. Moreover, controlling for

this discrepancy does not reduce the magnitude or significance of the frequency of contact variable in the base regression. The effect is still large and positive (β = 15.04, p= 0.01). Unlike the regression using mothers' reports, however, fathers reporting greater contract is not associated with math scores or BPI scores.

Discrepancies regarding father-child interaction

Using mother-reported data, a discrepancy about what types of activities the father and child do together only appears to explain variation in math scores. In fact, the finding is counterintuitive. Results indicate that when fathers report less types of interaction than mothers, children tend to have higher math scores. The order of magnitude is approximately one standard deviation. Perhaps fathers of bright children do not feel that they do enough with them.

Results are similarly counterintuitive when fathers' reports of his characteristics are used. Cases in which fathers overreport interaction relative to mothers are associated with lower reading scores ($\beta_{f>m}$= -13.33, p= 0.08) but there is no association with math scores. In this case, perhaps mothers of lesser achieving children feel that the father isn't doing enough. By contrast, any type of discrepancy about father-child interactions (an over- or underreport) is associated with behavior problems as measured by the BPI ($\beta_{f>m}$= 5.84, p= 0.02; $\beta_{f<m}$= 13.06, p = 0.00). Underreports are associated with behavioral problems as measured by the PBI ($\beta_{f<m}$= -3.72, p = 0.01). As is the case for fathers' marital status, while results may seem contradictory, it may be that the unobserved characteristic being captured by the discrepancy affects behavioral and scholastic outcomes differently.

Discrepancies regarding fathers' expenditures

Results in table 7-3 indicate that any type of disagreement between parents over what types of financial contributions the father makes is associated with poorer behavioral outcomes, as measured by the PBI. This finding is supported by analysis of the PBI using father-reported. Other analysis suggests that when fathers report greater contributions than mothers children tend to have better behavior outcomes as measured by the BPI ($\beta_{f<m}$= -5.01, p = 0.05). Assuming that fathers know more about their financial contributions than mothers, these findings are consistent with other research that indicates that greater financial contributions by nonresident fathers are associated with better child outcomes.

Discrepancies regarding interparental conflict

Analysis using mother-reported data and analysis using father-reported data both indicate that children tend to have higher reading scores when fathers report less interparental conflict than mothers. This finding provides limited evidence to suggest that the higher the level of fathers' satisfaction with the interparental relationship, the better off children might be. While this conclusion appears contradicted by the analysis on math scores, the coefficient that describes a positive relationship between math scores and fathers' perceptions of more conflict is marginally significant (p = 0.103) and not consistent with analysis using fathers reports.

Stronger evidence for the finding that children do better when there is less interparental conflict comes from multiple regressions in which some type of discrepancy (as measured by pairs of dummy variables) is held constant. All the dummy variable regressions on the PBI and BPI indicate a consistent, statistically significant positive

associations between mothers' reports of less conflict and better behavior. The same is true for analysis of math scores. Mothers' assessment of less conflict is associated with a better scholastic outcomes. The exception to this finding is reading scores. In this case, the evidence is mixed. Generally, mothers' assessment of less conflict is associated with slightly lower reading scores.

Findings are somewhat different when fathers' reports are used. With respect to the PBI and BPI, less conflict is not consistently associated with better behavior. Only when the discrepancies between mothers' and fathers' reports of conflict are controlled for, is fathers' report of less conflict statistically significantly associated with better behavior. This is likely to be due to the fact that fathers tended to report more conflict than mothers. The magnitude of the relationship between less conflict and better behavior is greater than when mothers' reports are used ($\beta_{PBI} = 0.41$, $p = 0.00$; ($\beta_{BPI} = 0.41$, $p = 0.01$). Unlike analysis using mothers' reports, fathers' assessment of interparental conflict is not associated with math scores but is consistently positively associated with reading scores.

ANALYSIS OF "FATHER OPTIMISM"

The prevalence of statistically significant coefficients on discrepancy variables begs the question: Are these variables actually measuring the same (omitted) construct? Are they competing for the same variance? Perhaps they all measure "father's satisfaction" with his status as a nonresident father. Some may measure the construct better than others. If these variables are all capturing the same omitted construct, the dummies should be highly correlated and one or more dummies should drop out of a regression in which they were all included. Analysis of Spearman correlations (not shown here) indicates that these

dummies are, in fact, correlated but many correlations are not statistically significant. If all dummy variables are included in the regression with the mothers' reports of all control variables and all measures of fathers' characteristics and behavior, no dummmy variable drops out. In fact, some dummy variables are statistically significant. This suggests that these variables are measuring more than one omitted construct.

Further support for the conclusion that different types of discrepancies measure different omitted constructs comes from the analysis of the "father optimism" variable. It may be that fathers who are more optimistic about their situation, the interparental relationship, and/or interaction with the child report more engagement, more financial contributions, more contact, and less interparental conflict than the mother. By contrast a more disgruntled father may underreport relative to mothers. In essence, some of the dummy variables may be proxying for fathers' attitudes or outlook. While a sound argument, tables 7-3 through 7-6 provides little evidence to this effect.

The results in table 7-3, 7-5, and 7-6 suggest that aggregating the different types of discrepancies is not particularly useful for explaining variation in child well-being. Instead, examining each type of discrepancy individually is more useful. There is one case in which the "father optimism" variable proves statistically significant. A greater degree of discrepancy (or higher optimism) is associated with slightly better BPI scores. However, the strength and magnitude of this relationship is not large. This, in combination with the analysis described previously, suggests that more than one latent construct is being captured by the dummy variables.

LIMITATIONS OF ANALYSIS

In interpreting the results presented here, it is important to acknowledge a few limitations of the analysis. First, despite corrections to sampling weights, this analysis is done on a sample of nonresident fathers with a response rate of 22 percent. To the extent that factors influencing selection are more correlated with the variables and issues of concern than with the independent variables used for reweighting, the generalizability of these results is limited to fathers with the characteristics described in chapter 5. One could argue, however, that cases in which nonresponse was due to an ability to locate the father are *not* cases in which there is likely to be high levels of disagreement around nonresident father-child involvement because contact is unlikely to exist.

Second, the literature on nonresident father involvement and child well-being confronts an endogeneity problem. As was alluded to earlier, it is possible that a child's characteristics affect how parents report their own behavior - a problem of reverse causality. For example, it could be that fathers report more or different levels of contact if the child is doing well (he takes credit). In the same circumstance mothers might be reluctant to report high levels of father involvement, so that she too can "take credit" for the child's positive outcomes. Such behavior would explain why fathers' reports are so highly correlated with positive child outcomes, but mothers' reports are not. This problem of reverse causality is not restricted to the analysis presented here. In this context, however, it begs the question "which parent is a more accurate reporter?" It is difficult to come to an objective conclusion regarding accuracy from the PSID CDS data presented. Arguments could be made in favor of both parents.

Finally, the discussion of the instruments' skip patterns presented previously applies here. While the child-households used in this analysis are those for which all relevant skip patterns apply, the fact that the skip patterns are not the same means that there might be some responses in the analysis that are not perfectly comparable.

SUMMARY

What do these results imply? The first conclusion to be drawn from this analysis is that inferences about the relationship between nonresident father involvement and child well-being change depend on whether mothers' or fathers' reports are used for analysis. Looking only at the analysis of mothers' reports or only at the analysis of fathers' reports, one would draw difference conclusions about the relationship between nonresident father characteristics and children's well-being. For example, using analysis of mothers' reports, policymakers would be reluctant to fund programs to increase visitation frequency, especially for academically underachieving children. By contrast, were they to use the results of analysis based on fathers' reports, they may well fund programs to increase father-child contact. Varying associations prompt different questions and possibly different policies depending on which data are used.

That different reporting sources can lead to different results has a second implication for researchers generally. Researchers have long known that their ability to identify real relationships in the population is a function of the quality and amount of survey data they use. This study suggests that who reports the data also impacts the nature of relationships that researchers unearth. Were a researcher to conduct analysis using only mothers' reports, s/he would draw conclusions and make policy recommendations that might be quite

different from the conclusions and recommendations that would result from analysis of father-reports.

A third implication comes from the analysis of dummy variables. Results suggest that the presence of a discrepancy indicates that there is "something else going on" that helps explain variation in child outcomes. Defining that "something else" is beyond the scope of this study. However, findings suggest that multiple constructs are being captured, and that one construct may be "father optimism." Overall, the dummy variable analysis indicates a need to identify and collect data on possible latent constructs which can help researchers and policymakers understand more about how the dynamics of nonresident families affect children. In short, it appears that collecting data about nonresident fathers' characteristics and behaviors may be insufficient. It may be necessary to collect attitudinal data to fully capture the relationship between nonresident father involvement and child well-being.

The next and final chapter discusses and makes recommendations regarding 1) improving data collection and possibly reducing reporting discrepancies, and 2) using mother-reported data as the sole source in analysis of nonresident father characteristics and involvement.

CHAPTER 8 : CONCLUSIONS AND RECOMMENDATIONS

This analysis set out to answer five research questions:

6. Are there discrepancies between mothers' and nonresident fathers' reports of nonresident fathers' characteristics and behaviors?

7. Do these discrepancies occur systematically in a manner that potentially underrepresents nonresident fathers' involvement with and on behalf of their children?

8. Do reporting discrepancies cause parameters estimates to vary depending on whose reports are used?

9. Does information about these discrepancies help us understand variation in child well-being?

10. What are the implications for future research and policymaking?

This chapter summarizes the answers to these questions.

CONCLUSIONS

Conclusion 1: Mother- and nonresident father- reports about the father's characteristics and behaviors differ.

Mothers are only partially aware of the nonresident father's characteristics, such as his current marital status and whether or not he has other children. They are more likely to know about things that pertain directly to involvement with the child - such as how far away the father lives. She is more likely to know about the nonresident fathers' characteristics if the father has seen the child in the previous year, the household is in poverty, the child is female, the child is black, the head of the child-mother household is not married, the child lives in a home where there is a "head of household and wife/partner," and the mother is educated.

Mothers and nonresident fathers also differ in their reports of the father's involvement with the child. With respect to frequency of contact, nonresident fathers report slightly lower levels of contact than do mothers. However, the fact that fathers report greater frequency of contact in all but two frequency categories ("not at all" and "one or more times a week") suggest that fathers' may perceive they visit their children more than mothers do. Fathers also report making financial contributions on behalf the child at a significantly higher rate than of mothers. This may indicate that fathers know more about payments to third parties, that they make contributions mothers do not know about, and/or that they feel a social obligation to report doing things for their child (like buying presents). They also report higher levels of engagement with the child than do mothers. This is especially the case for engagement in religious activities. While some more positive reporting by fathers is to be expected due to skip patterns, it also possible that mothers are unaware of the extent of father engagement, and/or fathers report in a manner they deem to be socially desireable.

Both parents also disagree about the father's influence in child-rearing decisions. Fathers report higher levels of influence in decision-making than do mothers. Just as they perceive themselves to be more financially involved and engaged with the child than mothers, these results suggest fathers are more likely to view their parenting activities and influence in a more positive light than mothers. This finding is also consistent with the fact that fathers' answers are conditional on his report of at least one communication with the mother in the previous year.

Finally, when asked about the interparental relationship, both parents are in moderate agreement about how frequently they talk about

the child. To the extent that there are discrepancies in reports, fathers tend to report more frequent communication about the child than do mothers. Fathers also tend to perceive higher levels of conflict around issues where the child lives, how the child is raised, and how the child is disciplined. When it comes to money, mothers believe there are higher levels of conflict around how the father spends money on the child. Fathers believe there to be higher levels of conflict around how mothers spend money on the child. These results suggest that each parent is likely to view issues that relate to them in a positive light.

One would expect mothers and fathers to agree about nonresident father behavior at a rate higher than what is expected by chance. The results of chapter 6 show that this is not always the case. The discrepancies in reports could arise from 1) a true lack of knowledge on the part of the mother about the characteristic or behavior in question, 2) differences in perception about parenting behaviors, 3) differences in interpretation of the question's meaning, reference period, and/or answer categories, 4) differences in question wording, and 5) differences in subsamples due to differing skip patterns. Addressing these different sources of reporting error is dealt with in the subsequent section on recommendations. At this juncture, it is sufficient to point out that the discrepancies do exist and they do have implications for estimating the relationship between nonresident father involvement and child well-being.

Conclusion 2: Parameter estimates change if analysis is conducted using fathers' reports instead of mothers' reports.

Chapter 7 showed that using the same model but different reporters of the same information alters the results of regression analysis. When mothers' reports are used we find that measures of nonresident father involvement, such as frequency of contact, are negatively associated

with child well-being. By contrast, when fathers' reports are used, increased contact is associated with higher levels of child well-being. Other differences in parameter estimates are discussed in Chapter 7.

If mothers were perfect proxy reporters for nonresident fathers and no discrepancies existed between reports, then parameter estimates would not change. It is the discrepancies between reports that alter regression output. Examining the discrepancies more closely, it becomes clear that the presence of a discrepancy may indicate "something else going on" in the family. Analysis presented and discussed in Chapter 7 suggests that the discrepancies may be measuring latent constructs, such as fathers' optimism toward his situation, that help explain the variation in child well-being. Further analysis of these latent constructs and the instrumentation used to collect father reports is needed to determine how, why, and which parents report nonresident fathers' characteristics and behavior differently.

A major finding of this study is: To whom you listen matters. While there is some agreement between mothers and nonresident fathers regarding nonresident father characteristics and behavior, the disagreements that exist affect the conclusions we draw about nonresident fathers and their children. These differences in how mothers and fathers perceive and report on paternal behaviors affect the "story" we tell about nonresident father involvement with their children. Relative to mothers, nonresident fathers portray their involvement in a more positive light. In some circumstances, parameter estimates based on fathers' reports suggest a more positive association between father involvement and child outcomes. As such, basing policy and practice on research that relies exclusively on mothers' reports may mean inappropriately emphasizing one strategy over another, framing strategies in ways the fathers find confusing or offensive, or down

weighting certain types of involvement (i.e. contact) relative to others (i.e. child support payment). Most certainly, this research suggests that both mothers *and* nonresident fathers need to have a voice in shaping research, policy, and practice.

RECOMMENDATIONS

Recommendation 1: Improve research based on mothers' reports by improving survey techniques.

The main findings of this study derive from discrepancies in reports between nonresident fathers and mothers. The source of these discrepancies is unclear. The likelihood is that some portion of the differences in reports is real and attributable to differences in how mothers and nonresident fathers view their respective parenting roles and the nature of their interparental relationship. Another portion of these discrepancies is likely to be due to weaknesses in the survey instrument. The PSID CDS asked each parent similar questions but used different skip patterns, wording of questions, and reference periods in the primary caregiver's and nonresident father's questionaires. The generalizability of these results depends, to a large degree, on the success of reweighting the nonresident father household sample to adjust for nonresponse and coverage error. At minimum, future data collection efforts should use better survey instruments and reduce nonresponse rates among nonresident fathers.

Surveying techniques do exist that can reduce the discrepancies in interpretation, thereby enhancing the quality and comparability of the data. First, when pretesting a survey in which the respondent will be a proxy reporter for another party, test the questions on both parties to see if the wording of the question and/or response categories are interpreted the same way. Second, use the information from more

extensive pretesting to determine which parts of the question are problematic and reword them accordingly. Third, clarify the response task. Throughout the PSID CDS, questions asked about nonresident father involvement required the parent to recall instances of engagement and evaluate how often they occurred over time. It was unclear whether the respondent was being asked to recall specific numbers of instances, or a general impression of instances. For example, when asked about seeing or talking with the child, both parents are asked: "Would you say: several times a week, about once a week, 1-3 times per month, several times a year, about once a year, less than once a year." "Would you say" may suggest that the respondent is being asked to recall a general impression of frequency. If one parent is being more precise than the other, this may affect data quality.

Where pretesting and rewording do not sufficiently reduce misunderstanding in surveys, research suggests that conversational interviewing techniques improve comprehension and improve data quality (Conrad and Schober, 2000). Generally, interviewers are trained to take a neutral stance on respondents' queries during an interview in order to minimize interviewer-effects in data collection. They are trained not to deviate from an interviewing script and to use "neutral probes" to encourage the respondent to interpret the question for him/herself (Conrad and Schober, 2000). "Conversational interviewing" uses a different approach in which the interviewer is allowed to engage with the respondent to help them understand the meaning of the question from the survey designers' perspective. Despite concerns about interviewers misleading respondents with this technique and about increased error due to interviewer variability, these concerns appear unfounded when interviewers are well-trained (Conrad and Schober, 2000). The drawback of this approach is that it lengthens the interview, and thus increases

surveying costs. This increase in cost may be a worthwhile tradeoff to improve data quality when research relies on proxy reporters.

Schaeffer (1991) notes, "[r]esearch by cognitive psychologists suggests that absolute and relative responses do not simply represent objective and subjective realities; they are differently constructed perceptions that probably have different error structures..." With this in mind, it would be worthwhile to investigate any differences in the way mothers' and nonresident fathers' view the vague quantifiers so often used to describe the relative frequency of nonresident father involvement.

Recommendation #2: Explore differences in mothers' and fathers' viewpoints on paternal behavior.

This study suggests that mothers and absent fathers may view paternal behaviors differently. Different perceptions of what constitutes parenting and what parenting behaviors are most important for the child may lead to interparental conflict, distrust or frustration with the other parent, or a lack of attention on the part of one parent to activities and investments by the other parent. As this research has demonstrated, interparental conflict has a negative impact on child well-being. Moreover, a lack of attention to certain behaviors on the part of a mother (because her priorities lie elsewhere) can weaken her effectiveness as proxy reporter - not only in the arena of research, but social services as well. A more thorough investigation of these differences in perception between custodial mothers and absent fathers would help improve the quality of survey instruments, enhance understanding of research results, and improve the effectiveness of policy and programmatic interventions.

These differences in perception may be related to the latent constructs discussed in Chapter 7. There is strong evidence to suggest that the questions asked by the PSID CDS do not capture all of the key aspects of nonresident father involvement that bear on child well-being. The dummy variable analysis indicates the presence of discrepancies actually indicates the presence of latent constructs that explain some of the variation in child well-being. Further analysis on the constructs being captured, how to measure them reliably, and their relation to child well-being should be explored.

Recommendation #3: Investigate possible latent constructs being captured by reporting discrepancies.

Extensive analysis presented in the previous chapter indicates that know if a reporting discrepancy exists, and the direction of the discrepancy, can help researchers identify children with better or poorer outcomes. Specifically, discrepancies about fathers' characteristics and behavior are "red flags" for children whose well-being differs from their peers whose parents tend to agree. Clearly, the presence of a discrepancy is proxying for an unmeasured construct that explains how and why a discrepancy is connected to child well-being. Analysis indicates that multiple unmeasured constructs may have been omitted from the regression. Identify these latent constructs and explaining their relationship to nonresident father involvement and to child well-being is important both from a theoretical perspective, but also for instrument creation and data collection.

Recommendation #4: Code and analyze data on reasons for mothers' refusal or inability to identify the nonresident fathers' whereabouts.

The problem of nonresponse addressed in this study is one that hampers the ability of researchers to fully consider absent fathers in analysis. Adjusting for nonresponse through the sample weights, as was

done here, is only a partial solution to the problem. In the PSID CDS, of those nonresident fathers who were successfully contacted, very few declined to participate in the survey. The major problem, was locating these men. The conclusions and recommendations presented here are not intended to downplay the difficulty of locating nonresident fathers, and the possibility that nonresident fathers who are not located are very different from those who are on some important aspects of father-child relationships. Certainly, there are other ways to identify and interview nonresident fathers than relying on mothers to provide this information. Court-based samples, interviewing men and tracing children through them, and following men from the birth of their children are all options. Just like relying on mothers' reports, these approaches have drawbacks. Some of these drawbacks (coverage error, underreporting of fatherhood, etc.) have been addressed in existing literature (Sorensen, 1997; Sorensen and Wheaton, 2000). Because most nationally representative household surveys use mothers to locate absent fathers, the recommendations presented here have focused on improving the quality of that data. Unfortunately, useful recommendations on how to better reach these fathers through mothers' reports cannot be suggested until analysis is done on why mothers choose not to provide information on their whereabouts.

Recommendation #5: Incorporate nonresident fathers' perspectives into research, policymaking, and practice.

The analysis presented here clearly demonstrates that nonresident fathers and mothers respond differently about the father's involvement with the child. While there are some "truths" (ie: fathers' characteristics, child support payments made), where there are no external criteria against which to evaluate data, both responses need to be explored. Research on the relationship between absent fathers and their children should incorporate both viewpoints to the greatest extent possible. Approaches to doing so include collecting paired data from

mothers and absent fathers and using focus groups or in-depth interviews to explore varying viewpoints. Because collected paired data is difficult and expensive, large national household surveys that collected data about the nonresident father from the mother might consider taking a random subsample of those households and collecting paired-data from them.

Incorporating nonresident fathers' perspectives has implications for policymaking and practice, as well as research. This study suggests attention should be paid to developing gender-appropriate interventions to promote responsible fatherhood that fit within and enhance existing community structures and expectations. The U.S. Department of Health and Human Services currently spends millions of dollars on fatherhood initiatives. Through the Partners for Fragile Families program, the federal government has issued waivers to allow ten states to promote partnerships between child support enforcement programs and community organizations to help young unmarried fathers meet their obligations to their children. The Department also funds Responsible Fatherhood projects to provide comprehensive social services to nonresident fathers to strengthen their financial and emotional ties with their children. Grants have been issued to involve fathers in early Head Start, to support children of incarcarated fathers, to promote access and visitation, and more. Because this study suggests that mothers and fathers view father involvement differently, all of these programs should incorporate men's conceptualizations fathering, and measure program outcomes in a manner that is both valid and reliable, but also reflects how fathers view themselves and their roles. Again, incorporation of fathers' perspectives does not require the exclusion of mothers' views. Rather, service delivery professionals (be they social workers or CSE officers) may find program goals are more frequently

achieved and sustained if both parents' views on the father-child relationship are taken into account.

FINAL THOUGHTS

The findings presented here are not the end of the story. Clearly, there is additional research to be done. How do the discrepancies discovered here compare to reporting differences between mothers and fathers who are married? who cohabitate? If similar findings emerged from a study of married and/or cohabitating couples, this would suggest an even greater need to explore the differences in mothers' and fathers' perceptions and experiences of parenting. How would findings differ had interval, and not ordinal Likert scales, been used? Substantial differences would suggest a need to refine data collection instruments; few differences would suggest the need to identify and measure the as yet unobserved characteristic associated with reporting discrepancies and influencing parameter estimates. How do the reporting discrepancies discovered here map onto the incentive structures built into social programs that target nonresident fathers and their families? The fact that mothers and fathers view nonresident fathers' behavior differently certain suggests that they would view and respond to social programs differently. This study opens the door to these and other important research questions.

APPENDIX A: MOTHERS' AND NONRESIDENT FATHERS' RESPONSES ON MATCHING QUESTIONS - NOT CONSTRAINED TO SKIP PATTERNS

Chapter 6 compares the responses of mothers and fathers to the same questions. In that chapter all comparisons are constrained such that all skip patterns apply to both groups, thereby ensuring the same group of child-cases are being compared. For interested readers, Appendix A provides the univariate tabulations of these questions, not constrained by the skip patterns.

NONRESIDENT FATHER CHARACTERISTICS

Table A-1: Nonresident Father Marital Status

Is nonresident father currently married?

	Mother response	NR Father response
Yes	26.2%	30.4%
No	70.9%	69.6%
Don't know	2.9%*	0%
Refused	0%	2.9%
	100%	100%
	n=251	n=250

Note: In all cases in which mothers answered "don't know" the nonresident father was separated. In all cases where the father refused the question, the mother answered that he was not married. The one case in which data for the nonresident father is missing, the mother answered that he was not married.

Table A-2: Nonresident Father's Other Children

Does the nonresident father have children other than those he had with mother?

	Mother response	NR Father response
Yes	16.2%	40.8%
No	83.5%	59.2%
Don't know	0.3%	
	100%	100%
	n=251	n=250

NONRESIDENT FATHER AND CHILD INTERACTION

Table A-3: Frequency of Father-Child Contact

During the last year, how often did child talk on the phone, receive a letter from, or see father?

	Mother response	NR Father response
Several times per week	73.3%	60.4%
1-3 times a month	17.4%	23.3%
Several times a year	6.9%	8.5%
About once a year	3.5%	4.0%
Never	0.0%	1.7%
	100%	100%
	n=251	n=251

Table A-4: Frequency of Father-Child Contact

Has father seen child in the last 12 months?

	Mother response
Yes	77.5%
No	22.5%

How many days did child stay with his/her father in the past 12 months?

	Mother Response
mean	34 days
median	14 days
don't know	1.3% (n=3)

In 1996 about how many did child actually spend with you?

	NR Father response
mean	78 days
median	48 days
doesn't apply	2.4% (n=6)
don't know	2.4% (n=6)
missing data	1.6% (n=4)

Table A-5: Father-Child Engagement (1)

How often does father spend time with child in each of the following activities? Would you say not at all, about once a year, several times a year, 1-3 times a month, about once a week, or several times a week?

Leisure activities such as picnics, movies, sports, or visiting family friends?

	Mother response	NR Father response
Not at all	20.6%	3.2%
About once a year	12.0%	11.2%
Several times a year	22.4%	27.0%
1-3 times a month	23.2%	27.4%
About once a week	15.0%	17.0%
Several times a week	4.2%	14.1%
Don't know	1.8%	
Refused	0.7%	
	100%	100%
	n=233	n=201
Missing (due to skip pattern)*	n= 18	n= 50

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they spent less than 12 days with the child in 1996.

Table A-6: Father-Child Engagement (2)

How often does father spend time with child in each of the following activities? Would you say not at all, about once a year, several times a year, 1-3 times a month, about once a week, or several times a week?

Religious activities?

	Mother response	NR Father response
Not at all	70.9%	42.4%
About once a year	6.0%	14.6%
Several times a year	7.3%	11.9%
1-3 times a month	10.6%	21.5%
About once a week	3.1%	8.1%
Several times a week	1.0%	1.5%
Don't know	0.2%	
Refused	0.9%	
	100%	100%
	n=233	n=201
Missing (due to skip pattern)*	n= 18	n= 50

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they spent less than 12 days with the child in 1996.

Table A-7: Father-Child Engagement (3)

How often does father spend time with child in each of the following activities? Would you say not at all, about once a year, several times a year, 1-3 times a month, about once a week, or several times a week?

Talking, working on a project, or playing together?

	Mother response	NR Father response
Not at all	24.4%	3.5%
About once a year	8.6%	4.8%
Several times a year	14.8%	20.5%
1-3 times a month	21.5%	26.2%
About once a week	15.4%	18.5%
Several times a week	11.0%	26.7%
Don't know	1.8%	
Refused	2.4%	
	100%	100%
	n=233	n=201
Missing (due to skip pattern)*	n= 18	n= 50

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they spent less than 12 days with the child in 1996.

Table A-8: Father-Child Engagement (4)

How often does father spend time with child in each of the following activities? Would you say not at all, about once a year, several times a year, 1-3 times a month, about once a week, or several times a week?

School or other organized activities?

	Mother response	NR Father response
Not at all	60.0%	44.1%
About once a year	4.9%	3.2%
Several times a year	15.0%	18.7%
1-3 times a month	3.7%	17.2%
About once a week	9.1%	6.9%
Several times a week	4.2%	8.5%
Don't know	1.3%	0.0%
Refused	1.9%	1.4%
	100%	100%
	n=233	n=201
Missing (due to skip pattern)*	n= 18	n= 50

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they spent less than 12 days with the child in 1996.

THINGS FATHER DOES FOR CHILD

Table A-9: Things father does for child (1)

Did (father) do any of the following things for the child during the past year?

Buy clothes toys or presents?

	Mother response	NR Father response
Yes	82.6%	93.8%
No	16.7%	6.2%
Refused	0.7%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-10: Things father does for child (2)

Did (father) do any of the following things for the child during the past year?

Pay for camp or lessons?

	Mother response	NR Father response
Yes	17.3%	31.2%
No	81.9%	68.4%
Refused	0.8%	0.5%
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-11: Things father does for child (3)

Did (father) do any of the following things for the child during the past year?

Take child on vacation?

	Mother response	NR Father response
Yes	25.9%	36.3%
No	73.4%	63.7%
Refused	0.7%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-12: Things father does for child (4)

Did (father) do any of the following things for the child during the past year?

Pay for dental or uninsured medical expenses?

	Mother response	NR Father response
Yes	25.3%	38.3%
No	74.0%	61.7%
Refused	0.7%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-10-13: Things father does for child (5)

Did (father) do any of the following things for the child during the past year?

Pay for child's medical insurance?

	Mother response	NR Father response
Yes	33.0%	44.6%
No	67.0%	54.4%
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

NONRESIDENT FATHER INFLUENCE

Table A-14: Nonresident Father Influence

How much influence does the nonresident father have in making decisions about such things as education, religion, and health care for the child?

	Mother response	NR Father response
None	45.5%	28.6%
Some	33.8%	40.2%
A great deal	20.1%	31.0%
Refused	0.6%	0.2%
	100 %	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

INTERPARENTAL COMMUNICATION

Table A-15: Interparental Communication about child

How often do you talk with the child's (mother/father) about the child? Would you say:

	Mother response	NR Father response
Several Times a Week	30.2	32.2
About Once a Week	13.7	16.0
1-3 Times a Month	23.4	27.6
Several Times a Year	15.3	12.3
About Once a Year	1.7	3.2
Less Than Once a Year or Never	15.1	8.5
Refused	0.6	0.2
	100%	100%
	n=233	n=251
Missing (due to skip pattern)*	n= 18	

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is asked of all nonresident fathers

CONFLICT BETWEEN MOTHER AND NONRESIDENT FATHER

Table A-16: Mother-Father Conflict Over Where Child Lives

Please tell me if you and child's (mother/father) have conflict over each of the following issues often, sometimes, hardly ever, or never.

Where the child lives?

	Mother response	NR Father response
Often	3.1%	4.2%
Sometimes	10.6%	11.1%
Hardly Ever	7.5%	13.9%
Never	78.1%	70.8%
Refused	0.7%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-17: Mother-Father Conflict Over How Child is Raised

Please tell me if you and child's (mother/father) have conflict over each of the following issues often, sometimes, hardly ever, or never.

How child is raised?

	Mother response	NR Father response
Often	12.9%	13.0%
Sometimes	7.6%	28.3%
Hardly Ever	20.6%	13.7%
Never	58.1%	45.0%
Refused	0.7%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-18: Mother-Father Conflict Over Child Discipline

Please tell me if you and child's (mother/father) have conflict over each of the following issues often, sometimes, hardly ever, or never.

Disciplining him/her?

	Mother response	NR Father response
Often	9.0%	12.3%
Sometimes	14.1%	21.2%
Hardly Ever	18.7%	17.6%
Never	57.0%	48.9%
Refused	1.2%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-19: Mother-Father Conflict Over Spending Money on Child

Please tell me if you and child's (mother/father) have conflict over each of the following issues often, sometimes, hardly ever, or never.

How (father) spends money on him/her?

	Mother response	NR Father response
Often	11.4%	9.2%
Sometimes	16.5%	12.6%
Hardly Ever	15.0%	17.4%
Never	55.6%	60.8%
Refused	1.5%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-20: Mother-Father Conflict Over Spending Money on Child

Please tell me if you and child's (mother/father) have conflict over each of the following issues often, sometimes, hardly ever, or never.

How (mother) spends money on him/her?

	Mother response	NR Father response
Often	4.3%	10.7%
Sometimes	11.5%	10.3%
Hardly Ever	10.5%	16.5%
Never	73.0%	62.4%
Refused	0.8%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-21: Mother-Father Conflict Over Child's Visits with Father

Please tell me if you and child's (mother/father) have conflict over each of the following issues often, sometimes, hardly ever, or never.

Child's visits to father?

	Mother response	NR Father response
Often	11.9%	11.0%
Sometimes	22.0%	13.8%
Hardly Ever	18.8%	11.9%
Never	46.6%	63.4%
Refused	0.7%	
	100%	100%
	n=233	n=229
Missing (due to skip pattern)*	n= 18	n= 22

Note: This question is not asked of mothers who indicate that the father has not seen the child in the last 12 months. The question is not asked of nonresident fathers who indicate that they speak to the mother once a year or less.

Table A-22: Questions asked of both mother and nonresident father

Question asked of mother	Mother Response Form	Question asked of father	Father Response Form	Changes made for analysis
Father Characteristics				
How far away from here does father live?	Distance in miles	About how far away from child do you live?	Distance in miles	None
Is father currently married?	Yes No Don't know	Are you….	(Re)married/other partner Separated Divorced Widowed Never Married	Father response converted to yes or no (married/not married).
Has he had any other children since those he had with you?	Yes No Don't know	Do you have any children other than those you had with child's mother?	Yes No	None
How many other children?	Number of children	How many other children do you have?	Number of children	None
Father-Child Engagement				
During the past 12 months, about how often did child talk on the telephone or receive a letter from his/her father?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	How often do you see or talk with child?	Several times a week About once a week 1-3 times a month Several times a year About once a year Less than once a year Never	New variable created; 0=didn't see/write/talk in last year, 1= see/write/talk once/yr, 2= see/write/talk several times/year 3= see/write/talk 1-3 times/month 4= see/write/talk once/week or more
In what month and year did child last see father?	Month and year	In what month and year did you last see child?	Month and year	Because of the wording of these questions as well as the timing of the survey administration, it is impossible to make these questions comparable. As a result, the questions related to the frequency of visitation are not included in the analysis.
During the past 12 months, how often did child see father?	Not at all (derived) About once a year Several times a year 1-3 times a month About once a week Several times a week	See previous	See previous	
How many days did child stay with father during the past 12 months?	Number of days	In 1996 about how many days did child actually spend with you?	Number of days	
Has father bought clothes, toys, or presents for the child in the past year?	Yes No	Did you buy clothes, toys, or presents for the child in the past year?	Yes No	None
Has father paid for camp or lessons for the child in the past year?	Yes No	Did you buy pay for camp or lessons for the child in the past year?	Yes No	None
Has father taken the child on vacation in the past year?	Yes No	Did you take the child on vacationd uring the past	Yes No	None

		year?		
Has father paid for dental or uninsured medical expenses for the child in the past year?	Yes No	Did you pay for dental or uninsured medical expenses for the child in the past year?	Yes No	None
Has father paid for medical insurance for the child in the past year?	Yes No	Did you pay for child's medical insurance in the last year?	Yes No	None
How often does father spend time with child in leisure activities such as picnics, movies, sports, or visiting family friends?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	How often do you spend time with child in leisure activities such as picnics, movies, sports, or visiting family friends?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	None
How often does father spend time with child in religious activities?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	How often do you spend time with child in religious activities?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	None
How often does father spend time with child talking, working on a project, or playing together?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	How often do you spend time with child talking, working on a project, or playing together?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	None
How often does father spend time with child in school or other organized activities?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	How often do you spend time with child in school or other organized activities?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	None
Mother-Father Relations				
How often do you talk about child with his/her father?	Not at all About once a year Several times a year 1-3 times a month About once a week Several times a week	How often do you talk with child's mother about child?	Several times a week About once a week 1-3 times a month Several times a year About once a year Less than once a year Never	Father response categories inverted and "less than once a year" and "never" combined into a category deemed equivalent to "not at all."
How much influence does child's father have in making decisions about such things as education, religion, and health care?	None Some A Great Deal	How much influence do you have in making decisions about such things as education religion, and health care for child?	None Some A Great Deal	None
How often do you and the child's father have conflict over: Where child lives?	Often Sometimes Hardly Ever Never	How often do you and the child's mother have conflict over: Where child lives?	Often Sometimes Hardly Ever Never	None

How often do you and the child's father have conflict over: How s/he is raised?	Often Sometimes Hardly Ever Never	How often do you and the child's mother have conflict over: How s/he is raised?	Often Sometimes Hardly Ever Never	None
How often do you and the child's father have conflict over: Disciplining child?	Often Sometimes Hardly Ever Never	How often do you and the child's mother have conflict over: Disciplining child?	Often Sometimes Hardly Ever Never	None
How often do you and the child's father have conflict over: How you spend money on child?	Often Sometimes Hardly Ever Never	How often do you and the child's mother have conflict over: How you spend money on child?	Often Sometimes Hardly Ever Never	None
How often do you and the child's father have conflict over: How he spend's money on child?	Often Sometimes Hardly Ever Never	How often do you and the child's mother have conflict over: How he spend's money on child?	Often Sometimes Hardly Ever Never	None
How often do you and the child's father have conflict over: His visits with child?	Often Sometimes Hardly Ever Never	How often do you and the child's mother have conflict over: His visits with child?	Often Sometimes Hardly Ever Never	None

APPENDIX B: DESCRIPTION OF THE DEPENDENT AND INDEPENDENT VARIABLES USED IN REGRESSION ANALYSIS

DEPENDENT VARIABLES

The Positive Behavior Scale

The Positive Behavior Scale measures the positive aspects of children's behavior for children over the age of three. The scale used in the PSID-CDS consists of 10 items measured on a 5-point Likert scale where 1 means "not at all like my child," and 5 means "totally like my child." Table B-1 describes the questions from the Primary Caregiver Child Questionnaire included in the index. Summing scores on the raw items generates scores that range from 10 to 50.

Table B-1: Positive Behavior Scale Items

	Question	Total
a	Is cheerful, happy	X
b	Waits his or her turn in games or other activities	X
c	Does neat, careful work	X
d	Is curious and exploring, likes new experiences.	X
e	Thinks before he or she acts, is not impulsive	X
f	Gets along well with other children	X
g	Usually does what I tell (him/her) to do	X
h	Can get over being upset quickly	X
i	Is admired and well-liked by other children	X
j	Tries to do things for (himself/herself), is self-reliant	X
Maximum Score		50

There were three cases of item nonresponse on the questions that comprise the PBI. In order to maintain sample size, missing values were imputed using the scores on the other nine questions, along with the child's age and race.

The Behavior Problems Index

The Behavior Problems Index measures the incidence and severity of child behavior problems. To generate the Index, the PSID CDS asked the primary caregiver 30 behavior-related questions of children 3 years and older. Scores are based on primary caregiver responses as to whether a child experiences problem behaviors often, sometimes, or never. Summing scores on the raw items generates scores, which range from zero to 90. A higher score indicates more problematic behavior. Table B-2 describes which questions from the Primary Caregiver Child Questionnaire are included in the Index.

Of the 251 child-households with a nonresident father respondent, 212 children were eligible for a BPI interview. Seven children were missing the BPI Total Composite Score. The BPI Total Score was imputed using seven variables: the child's age, the child's race, the BPI External Subscale Score, the BPI Internal Subscale Score, and three variables in which the mother was asked to indicate whether the child was difficult to raise.

Table B-2: Behavior Problem Scale Items

	Question
bb	(He/She) hangs around with kids who get into trouble.
w	(He/She) clings to adults.
x	(He/She) cries too much.
l	(He/She) has trouble getting along with other children
a	(He/She) has sudden changes in mood or feeling.
c	(He/She) is rather high strung and nervous.
d	(He/She) cheats or tells lies.
f	(He/She) argues too much
g	(He/She) has difficulty concentrating, cannot pay attention for long.
i	(He/She) bullies or is cruel or mean to others.
j	(He/She) is disobedient.
k	(He/She) does not seem to feel sorry after (he/she) misbehaves.
m	(He/She) is impulsive,or acts without thinking.
q	(He/She) is restless or overly active, cannot sit still
r	(He/She) is stubborn, sullen, or irritable.
s	(He/She) has a very strong temper and loses it easily.
v	(He/She) breaks things on purpose or deliberately destroys own or another's things.
y	(He/She) demands a lot of attention.
aa	(He/She) feels others are out to get (him/her).
b	(He/She) feels or complains that no one loves him/her.
cc	(He/She) is secretive, keeps things to (himself/herself).
dd	(He/She) worries too much.
e	(He/She) is too fearful or anxious.
h	(He/She) is easily confused, seems to be in a fog.
n	(He/She) feels worthless or inferior.
o	(He/She) is not liked by other children.
p	(He/She) has difficulty getting mind off certain thoughts.
t	(He/She) is unhappy, sad or depressed.
u	(He/She) is withdrawn, does not get involved with others.
z	(He/She) is too dependent on others.

Source: Hofferth, S., Davis-Kean, P., Davis, J., Finkelstein, J. (1997). Child Development Supplement of the Panel Study of Income Dynamics, 1997 User Guide, Chapter 6 Assessments and Scales, Table 6. Survey Research Center Institute for Social Research, The University of Michigan, Ann Arbor, MI @http://www.isr.umich.edu/src/child-development/usergd.html.

The Woodcock-Johnson-Revised Tests of Achievement

The Woodcock-Johnson-Revised Tests of Achievement are used to evaluate scholastic aptitude in reading and math. Four subscale scores in reading and math are available, as well as two broad measures of reading and math ability for children ages 6-12. While only one reading subscale score for children 3-12 and the broad math score are presented as part of this study, the broad reading score was analyzed as part of

preliminary analysis. Results using the two different reading scores were similar but using the subscale score provided additional sample size, and was thus chosen for final presentation. All measures are norm-referenced with a population mean of 100 and standard deviation of 15 points. Broad math scores are available for 116 of 149 eligible children. Reading readiness scores are available for 164 of 212 eligible children. No attempt was made to impute missing data.

INDEPENDENT VARIABLES

Five categories of independent variables are included in the regressions presented here: 1) child characteristics, 2) mother characteristics, 3) the home environment, 4) nonresident father involvement measures, and 5) the interparental relationship. With respect to child characteristics three variables are included: child's sex, child's race, and child's on-time birth status - or child's learning disability status. Child's birth status is included in the model to account for the status of the child's physical health. Of the child health variables available in the PSID CDS, the child's on-time birth status was among the most highly correlated with the indicators of emotional well-being. Birth status is only included in regressions on the PBI or BPI indices. Whether or not the child has a learning disability is substituted for birth status in the regressions of scholastic aptitude to maintain sample size, and because it is more highly correlated with education indicators than on-time birth status. Child's age is not included because all of the measures of well-being were developed for use with children of a specific age.

One measure of the mother's characteristic is used: her status as a single mother. Additional characteristics of the mother, such as educational attainment, are not included on the assumption that these

effects are captured by measures of the home environment and poverty status, and for reasons of statistical power discussed in the text.

In order to control for the effects of the household environment on child well-being, a measure of whether or not the child household is in poverty and a measure of the cognitive stimulation and emotional support parents provide to children is included. The HOME Scale, or the Home Observation for Measurement of the Environment-Short Form from the Caldwell and Bradley HOME Inventory measures the latter construct. The HOME2 score is used instead of the HOME1 score because it excludes items related to father involvement with the child (Hoffreth et al, 1997).

Nonresident father characteristics and involvement are measured using a number of questions asked of both parents: the father's marital status, other child status, contact frequency, types of interactions with the child, types of financial expenditures on behalf of the child, and parents' assessment of interparental conflict.

Finally, because research indicates that father-child contact declines as the time since the father and child have cohabitated, a measure of "time since separation" is included in the analysis. The variable, which is generated using fathers' reports and the father's interview date, is measured in months. In cases where the father and child never lived together, the value of the variable is the child's age in months. The time between the mothers' and fathers' interviews (measured in days) is also included in the analysis to control for unobserved characteristics that may contribute to discrepancies, such as fathers' lack of availability, mobility, etc.

APPENDIX C: REGRESSION RESULTS WITH FATHER-REPORTED DATA

Table C-1: Regression results using father-reported data: PBI

		Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	-0.43	-0.38	-0.41	-0.43	-0.27	0.22	-0.56	-0.40
	Child is Nonwhite	4.83***	5.03***	4.82**	4.81***	5.36***	5.30***	4.86***	4.85***
	Child was Premie	-0.45	-0.68	-0.46	-0.61	-0.99	-0.29	0.11	-0.25
	Single Mother	0.79	0.75	0.80	0.67	0.39	1.74	0.72	0.79
	HH in Poverty	-1.07	-1.37	-1.04	-1.16	-1.03	-0.90	-1.30	-1.04
	HOME2 Score	0.38	0.44*	0.38	0.38*	0.37*	0.55**	0.40	0.36
	Mother receives child support	0.73	0.81	0.69	0.50	0.48	0.15	0.93	1.01
	Time since father lived w/child	0.02[1]	0.02	0.02	0.02	0.02	0.02[1]	0.02	0.02
	Time between mother's and father's interview	-0.03**	-0.03**	-0.03*	-0.03**	-0.03**	-0.03**	-0.03**	-0.03**
Father Variables	Father is Married	-1.03	-0.39	-0.97**	-0.92	-0.74	-1.49	-0.93	-1.10
	Father Has Other Children	0.94	-0.29	0.74	0.86	1.37	1.26	0.71	0.91
	Father Contact Frequency	2.49*	2.51*	2.49*	2.13	2.80*	2.37*	2.44*	2.64*
	Father-Child Interaction	-0.25	-0.25	-0.25	-0.24	-0.28*	-0.26*	-0.24[1]	-0.24
	Father Expenditure	0.36	0.24	0.37	0.32	0.31	0.38	0.27	0.42
	Interparental Conflict	0.15	0.17[1]	0.15	0.13	0.15	0.11	0.41**	0.18
Discrepant Cases	Father is married, but mother says not		-2.55*						
	Father is not married, but mother says yes		0.96						
	Father has other kids, but mother says not			0.61					
	Father no other kids, but mother says yes			2.60					
	Father reports more contact than mom				0.41				
	Father reports less contact than mom				-0.80				
	Father reports more interaction than mom					-1.76			
	Father reports less interaction than mom					-3.72**			
	Father reports more expenditures than mom						-2.30**		
	Father reports less expenditures than mom						-4.98***		
	Father reports less conflict than mom							-1.14	
	Father reports more conflict than mom							2.53	
	Father optimism								-0.22
	Constant	21.93***	20.64***	21.86***	24.02**	23.97***	20.89***	16.61**	20.69**
	R^2	0.31	0.32	0.32	0.32	0.34	0.37	0.36	0.32
	Partial F-test (p-value)		0.23	0.78	0.78	0.02	0.01	0.01	
	n	138	138	138	138	138	138	138	138

Note: Statistical significance evaluated using t-tests of the parameter estimate.
* statistically significant at $p \leq 0.10$; ** statistically significant at $p \leq 0.05$; *** statistically significant at $p \leq 0.001$
[1] statistically significant at $p \leq 0.11$

Table C-2: Regression results using father-reported data: BPI

		Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	2.21	2.06	2.02	2.17	1.64	3.63*	2.43	2.31
	Child is Nonwhite	-5.94**	-6.02**	-6.00**	-5.90**	-7.77***	-5.35**	-5.90**	-5.90**
	Child was Premie	0.74	1.64	0.97	2.36	2.64	1.61	-0.43	1.47
	Single Mother	-6.38*	-6.01*	-6.80*	-5.03*	-5.02 [1]	-6.29*	-6.26*	-6.36*
	HH in Poverty	4.50*	4.72*	3.86*	5.28**	4.29**	5.89**	4.52*	4.63*
	HOME2 Score	-1.43**	-1.60**	-1.54**	-1.37**	-1.42**	-1.55**	-1.44**	-1.48**
	Mother receives child support	-2.65	-3.91	-2.60	-0.40	-1.70	-1.54	-3.05	-1.64
	Time since father lived w/child	-0.05*	-0.04 [1]	-0.04*	-0.04	-0.03	-0.06**	-0.03	-0.05*
	Time between mother's and father's interview	0.02	0.02	0.02	0.02	0.03*	0.04*	0.03	0.03
Father Variables	Father is Married	3.51*	2.44	4.47**	2.19	2.47	3.11	3.50*	3.28 [1]
	Father Has Other Children	-3.83	-3.93	-6.57**	-2.90	-5.35**	-4.02*	-3.45	-3.93*
	Father Contact Frequency	-7.61**	-6.96**	-7.95**	-3.36	-8.65**	-7.90**	-8.13**	-7.09**
	Father-Child Interaction	0.60**	0.48	0.63**	0.61**	0.73**	0.63**	0.64**	0.63**
	Father Expenditure	-1.23 [1]	-0.91	-1.48**	-0.77	-1.06	-0.42	-1.02	-1.00
	Interparental Conflict	-0.20	-0.22	-0.23	-0.03	-0.20	-0.17	-0.71**	-0.07
Discrepant Cases	Father is married, but mother says not		1.24						
	Father is not married, but mother says yes		-10.60**						
	Father has other kids, but mother says not			5.57**					
	Father no other kids, but mother says yes			-10.41					
	Father reports more contact than mom				-2.80				
	Father reports less contact than mom				10.11				
	Father reports more interaction than mom					5.85**			
	Father reports less interaction than mom					13.06***			
	Father reports more expenditures than mom						-5.01**		
	Father reports less expenditures than mom						1.62		
	Father reports less conflict than mom							4.63	
	Father reports more conflict than mom							-3.38	
	Father optimism								-0.81
	Constant	105.98***	108.80***	110.73***	80.06***	98.86***	106.19***	115.94***	101.42***
	R^2	0.38	0.40	0.40	0.43	0.45	0.42	0.44	0.39
	Partial F-test (p-value)		0.09	0.08	0.08	0.00	0.01	0.01	
	n	138	138	138	138	138	138	138	138

Note: Statistical significance evaluated using t-tests of the parameter estimate.

* statistically significant at $p \leq 0.10$; ** statistically significant at $p \leq 0.05$; *** statistically significant at $p \leq 0.001$

[1] statistically significant at $p \leq 0.11$

Table C-5: Regression results using father-reported data: Reading Score, Ages 3-12

		Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	-7.72**	-8.20**	-7.70**	-7.34**	-7.85**	-7.63*	-6.59*	-7.40**
	Child is Nonwhite	6.68*	5.59	6.73*	3.09	6.84*	6.76*	5.77*	6.80**
	Child was Premie	-18.05***	-19.29***	-17.98***	-17.62***	-16.75***	-18.01***	-22.14***	-17.51***
	Single Mother	-1.05	-0.58	-0.98	-2.40	-3.33	-0.82	-2.30	-1.49
	HH in Poverty	3.22	3.39	3.31	1.73	0.40	3.26	0.70	3.56
	HOME2 Score	1.15*	0.88	1.17	1.85**	1.17[1]	1.17*	1.18	1.22*
	Mother receives child support	6.98*	5.10	6.91*	5.30	7.14	6.92	5.97*	4.05
	Time since father lived w/child	-0.86*	-0.09*	-0.09[1]	-0.07	-0.07	-0.09*	-0.07	-0.07
	Time between mother's and father's interview	0.12*	0.10*	0.12*	0.10[1]	0.12**	0.12**	0.12**	0.11*
Father Variables	Father is Married	3.23	-0.19	3.16	1.49	3.59	3.17	3.01	3.84
	Father Has Other Children	-4.38	-2.68	-4.17	-0.82	-4.13	-4.33	-3.03	-4.25
	Father Contact Frequency	12.32**	12.78**	12.36**	15.04**	14.82**	12.29**	8.62*	11.34**
	Father-Child Interaction	-1.57**	-1.78***	-1.58**	-0.69	-1.32**	-1.58**	-1.11**	-1.66***
	Father Expenditure	4.28**	4.61***	4.32**	4.39***	4.79***	4.30**	4.40**	4.04**
	Interparental Conflict	1.41***	1.24***	1.42***	1.48***	1.20**	1.41***	1.09**	1.11**
Discrepant Cases	Father is married, but mother says not		6.51						
	Father is not married, but mother says yes		-11.73						
	Father has other kids, but mother says not			-0.37					
	Father no other kids, but mother says yes			1.43					
	Father reports more contact than mom				15.85***				
	Father reports less contact than mom				14.51*				
	Father reports more interaction than mom					-13.33*			
	Father reports less interaction than mom					-6.59			
	Father reports more expenditures than mom						-0.46		
	Father reports less expenditures than mom						-1.08		
	Father reports less conflict than mom							16.78***	
	Father reports more conflict than mom							6.93	
	Father optimism								1.72[1]
	Constant	14.48	26.30	13.81	-24.99	16.28	14.41	18.90	24.10
	R^2	0.53	0.54	0.53	0.60	0.55	0.53	0.60	0.54
	Partial F-test (p-value)		0.23	0.97	0.01	0.09	0.98	0.00	
	n	110	110	110	110	110	110	110	110

Note: Statistical significance evaluated using t-tests of the parameter estimate.

* statistically significant at $p \leq 0.10$; ** statistically significant at $p \leq 0.05$; *** statistically significant at $p \leq 0.001$

[1] statistically significant at $p \leq 0.11$

Table C-7: Regression results using father-reported data: Math Score, Ages 6-12

		Fathers' reports	Dummy Variable (1)	Dummy Variable (2)	Dummy Variable (3)	Dummy Variable (4)	Dummy Variable (5)	Dummy Variable (6)	Father Optimism
Control Variables	Child is Female	-14.52***	-14.50***	-14.55***	-14.41**	-14.74***	-13.67***	-16.63***	-14.90***
	Child is Nonwhite	-2.91	-3.78	-2.93	-3.73	-3.12	-2.10	-4.45	-2.47
	Child was Premie	-24.45***	-25.07***	-24.46***	-24.94***	-24.24***	-23.82***	-23.05***	-23.32***
	Single Mother	2.92	2.71	2.85	3.65	2.91	2.90	3.07	1.87
	HH in Poverty	-11.71**	-10.77**	-11.78**	-11.85**	-11.99**	-11.58**	-12.43**	-12.36***
	HOME2 Score	-0.48	-0.64	-0.51	-0.24	-0.54	-0.33	-0.33	-0.59
	Mother receives child support	2.69	1.19	2.74	1.29	2.77	2.29	3.65	4.52
	Time since father lived w/child	0.03	-0.04	-0.03	-0.03	-0.03	-0.05	-0.03	-0.04
	Time between mother's and father's interview	0.02	-0.01	0.02	0.02	0.02	0.02	0.01	0.02
Father Variables	Father is Married	-7.06*	-12.31**	-6.98	-6.88	-7.31	-7.15*	-5.19*	-7.02*
	Father Has Other Children	-4.95	-1.45	-5.21	-5.06	-5.00	-4.91	-7.30	-5.31
	Father Contact Frequency	3.70	4.31	3.69	1.20	3.74	4.14	3.31	5.48
	Father-Child Interaction	-1.63**	-1.88***	-1.63**	-1.49**	-1.62**	-1.62**	-1.56**	-1.61**
	Father Expenditure	3.53**	4.02**	3.52**	3.21*	3.62**	3.66**	2.58*	3.75**
	Interparental Conflict	0.05	-0.06	0.05	-0.02	0.03	-0.06	0.88	0.21
Discrepant Cases	Father is married, but mother says not		8.62						
	Father is not married, but mother says yes		-12.35						
	Father has other kids, but mother says not			0.38					
	Father no other kids, but mother says yes			-2.25					
	Father reports more contact than mom				3.39				
	Father reports less contact than mom				-3.37				
	Father reports more interaction than mom					-7.59			
	Father reports less interaction than mom					-6.42			
	Father reports more expenditures than mom						-4.17		
	Father reports less expenditures than mom						-2.98		
	Father reports less conflict than mom							-2.23	
	Father reports more conflict than mom							9.69	
	Father optimism								-1.44
	Constant	126.71***	135.29***	127.46***	132.07***	135.09***	126.87***	109.79***	120.02
	R^2	0.60	0.62	0.60	0.61	0.60	0.61	0.64	0.61
	Partial F-test (p-value)		0.12	0.96	0.70	0.66	0.75	0.03	
	n	82	82	82	82	82	82	82	82

Note: Statistical significance evaluated using t-tests of the parameter estimate.
* statistically significant at $p \leq 0.10$; ** statistically significant at $p \leq 0.05$; *** statistically significant at $p \leq 0.001$
[1] statistically significant at $p \leq 0.11$

APPENDIX D: PSID CDS SURVEY INSTRUMENTS

1. Section of the Primary Caregiver Child Questionnaire related to nonresident fathers.

2. Sections of Fathers Outside the Home Questionnaires with questions that match the Primary Caregiver Child Questionnaire

For the complete questionnaires please visit:
http://www.isr.umich.edu/src/child-development/english.html#Primary - Child

Child Development Supplement

FOR PRIMARY CAREGIVER OF TARGET CHILD

CHILD BOOKLET

The University of Michigan
Survey Research Center
Institute for Social Research
Ann Arbor, MI 48106

SAMPLE LABEL

INTERVIEWER LABEL

THIS STATEMENT MUST BE READ TO ALL RESPONDENTS

This interview is completely voluntary and confidential. If we should come to any question you do not want to answer, let me know and we'll go on to the next question. Your answers will be kept completely confidential.

Date of IW: _____

Length of IW: _____

Length of Edit: _____

SECTION J

J1. INTERVIEWER CHECKPOINT

- ☐ 1. BOTH OF CHILD'S PARENTS ARE LIVING IN THIS HOUSEHOLD→ TURN TO PAGE 71, SECTION K
- ☐ 2. CHILD'S MOTHER IS IN HH AND FATHER NOT IN HH→GO TO J2
- ☐ 3. CHILD'S FATHER IS IN HH AND MOTHER NOT IN HH→TURN TO PAGE 66, J17
- ☐ 4. NEITHER MOTHER NOR FATHER LIVING IN HH

ABSENT FATHER

J2. (ASK ONLY IF NECESSARY, BUT MARK BOX) Is (CHILD)'s biological father still living?

1. YES	→NEXT PAGE, J3	5. NO	8. DON'T KNOW	→TURN TO PAGE 66, J16

J2a. In what month and year did he die?

_____/_____ (MONTH) (YEAR)

DON'T KNOW

TURN TO PAGE 66, J16

J3. About how far away from here does he live?

_____ # MILES → GO TO J4

8. DON'T KNOW

J3a. What state or country does he live in?

_____ STATE OR COUNTRY

J4. Is he currently married?

1. YES | 5. NO | 8. DON'T KNOW

J5. Has he had any other children since those he had with you?

1. YES | 5. NO | 8. DON'T KNOW

GO TO J6

J5a. How many?

_____ (NUMBER OF CHILDREN)

J6. (RB, P. 27) During the past 12 months, about how often did (CHILD) talk on the telephone or receive a letter from (his/her) father? Would you say not at all, about once a year, several times a year, one to three times a month, about once a week, or several times a week?

1. NOT AT ALL | 2. ABOUT ONCE A YEAR | 3. SEVERAL TIMES A YEAR

4. ONE TO THREE TIMES A MONTH | 5. ABOUT ONCE A WEEK | 6. SEVERAL TIMES A WEEK

J7. In what month and year did (CHILD) last see (him/her)?

_____/_____
MONTH YEAR

NEVER → GO TO J11

J8. INTERVIEWER CHECKPOINT:

HAS FATHER SEEN (CHILD) IN LAST 12 MONTHS?

1. YES

5. NO → TURN TO PAGE 66, J16

J9. (RB, P. 27) During the past 12 months, how often did (CHILD) see (his/her) father?

2. ABOUT ONCE A YEAR

3. SEVERAL TIMES A YEAR

4. ONE TO THREE TIMES A MONTH

5. ABOUT ONCE A WEEK

6. SEVERAL TIMES A WEEK

J10. How many days did (CHILD) stay with (his/her) father during the past 12 months?

_____ NUMBER OF DAYS

J11. (RB, P. 27) How often do you talk about (CHILD) with (his/her) father?

1. NOT AT ALL

2. ABOUT ONCE A YEAR

3. SEVERAL TIMES A YEAR

4. ONE TO THREE TIMES A MONTH

5. ABOUT ONCE A WEEK

6. SEVERAL TIMES A WEEK

J12. How much influence does (CHILD'S) father have in making decisions about such things as education, religion, and health care? Would you say none, some or a great deal?

1. NONE

2. SOME

3. A GREAT DEAL

J13. (RB, P. 28) How often do you and (CHILD's) father have conflict over each of the following issues? Please tell me if you have conflict often, sometimes, hardly ever, or never over:

		OFTEN	SOMETIMES	HARDLY EVER	NEVER
a.	Where (CHILD) lives.	1	2	3	4
b.	How (he/she) is raised.	1	2	3	4
c.	Disciplining (CHILD).	1	2	3	4
d.	How you spend money on (CHILD).	1	2	3	4
e.	How he spends money on (CHILD).	1	2	3	4
f.	The amount of time he spends with (CHILD).	1	2	3	4
g.	His visits with (CHILD).	1	2	3	4
h.	His contribution to (CHILD'S) support.	1	2	3	4
j.	His (CHILD's father's) use of alcohol or drugs.	1	2	3	4
k.	The friends he (CHILD's father) spends time with.	1	2	3	4

J14. (RB, P. 29) How often does (CHILD'S) father spend time with (him/her) in each of the following activities? Would you say not at all , about once a year, several times a year, 1-3 times a month, about once a week, or several times a week?

		NOT AT ALL	ABOUT ONCE A YEAR	SEVERAL TIMES A YEAR	1 TO 3 TIMES A MONTH	ABOUT ONCE A WEEK	SEVERAL TIMES A WEEK
a.	Leisure activities such as picnics, movies, sports, or visiting family friends.	1	2	3	4	5	6
b.	Religious activities.	1	2	3	4	5	6
c.	Talking, working on a project, or playing together.	1	2	3	4	5	6
d.	School or other organized activities.	1	2	3	4	5	6

J15. Has (CHILD'S) father done any of the following things for (CHILD) during the past year?

		YES	NO
a.	Buy clothes, toys or presents.	1	5
b.	Pay for camp or lessons.	1	5
c.	Take (CHILD) on vacation.	1	5
d.	Pay for dental or insured medical expenses.	1	5
e.	Pay for (CHILD)'s medical insurance.	1	5
f.	Any other things? (SPECIFY):_____	1	5

J16. INTERVIEWER CHECKPOINT:

☐ 1. CHILD'S MOTHER DOES NOT LIVE IN HOUSEHOLD

☐ 2. ALL OTHERS → TURN TO PAGE 71, SECTION K

ABSENT MOTHER

J17. (ASK OR VERIFY, BUT MARK BOX) Is (CHILD)'s biological mother still living?

1. YES →NEXT PAGE, J18

5. NO

8. DON'T KNOW →TURN TO P. 71, K0

J17a. When did she die?

_____/_____ →TURN TO P. 71, SECTION K

MONTH YEAR

Child Development Supplement

FATHERS WHO LIVE OUTSIDE THE HOME OF THE TARGET CHILD
Child Questionnaire

The University of Michigan
Survey Research Center
Institute for Social Research
Ann Arbor, MI 48106

SAMPLE LABEL

INTERVIEWER LABEL

THIS STATEMENT MUST BE READ TO ALL RESPONDENTS

This interview is completely voluntary and confidential. If we should come to any question you do not want to answer, let me know and we'll go on to the next question. Your answers will be kept completely confidential.

Date of IW: _____

Length of IW: _____

Length of Edit: _____

SECTION A

A0. **EXACT TIME NOW:** _____

A1. About how far away from (CHILD) do you live?

_____ (ACTUAL OR ESTIMATED MILES)

A2. How often do you talk with (CHILD)'s mother about (CHILD)? Would you say several times a week, about once a week, one to three times a month, several times a year, about once a year, or less than once a year?

1. SEVERAL TIMES A WEEK	2. ABOUT ONCE A WEEK	3. 1-3 TIMES A MONTH	4. SEVERAL TIMES A YEAR

5. ABOUT ONCE A YEAR	6. LESS THAN ONCE A YEAR	7. [IF VOL] NEVER

A3. In what month and year did you last live with (CHILD)?

_____ MONTH _____ YEAR

NEVER LIVED WITH CHILD

A4. In what month and year did you last see (CHILD)?

_____ (MONTH) _____(YEAR)

HAS NEVER SEEN CHILD

↓

NEXT PAGE, A7

A5. How often do you see or talk with (CHILD)? Would you say several times a week, about once a week, one to three times a month, several times a year, about once a year, or less than once a year?

1. SEVERAL TIMES A WEEK	2. ABOUT ONCE A WEEK	3. 1-3 TIMES A MONTH	4. SEVERAL TIMES A YEAR

5. ABOUT ONCE A YEAR	6. LESS THAN ONCE A YEAR	7. [IF VOL] NEVER

↓

NEXT PAGE, A7

A6. In 1996 about how many days did (CHILD) actually spend with you?

_____ DAYS

A7. INTERVIEWER CHECKPOINT

SEE A2, PAGE 1

☐ 1. R SPOKE WITH CHILD'S MOTHER ONCE A YEAR OR LESS
(A2 CODED 5, 6 OR 7) → GO TO A11

☐ 2. R SPOKE WITH CHILD'S MOTHER MORE THAN ONCE A YEAR
(A2 CODED 1, 2, 3, OR 4)

A8. How much influence do you have in making decisions about such things as education, religion, and health care for (CHILD)? Would you say none, some, or a great deal?

1. NONE	2. SOME	3. A GREAT DEAL

A9. Please tell me if you and (CHILD)'s mother have conflict over each of the following issues often, sometimes, hardly ever, or never.

		OFTEN	SOME-TIMES	HARDLY EVER	NEVER
a.	Where (CHILD) lives. (Do you and (his/her) mother have conflict over this often, sometimes, hardly ever, or never?)	1	2	3	4
b.	How (CHILD) is raised.	1	2	3	4
c.	Disciplining (him/her).	1	2	3	4
d.	How you spend money on (him/her).	1	2	3	4
e.	How she spends money on (CHILD).	1	2	3	4
f.	The amount of time she spends with (CHILD). (Do you and [CHILD's] mother have conflict over this often, sometimes, hardly ever, or never?)	1	2	3	4
g.	(CHILD)'s mother's use of alcohol or drugs.	1	2	3	4
h.	The friends she [(CHILD)'s mother] spends time with.	1	2	3	4
i.	(CHILD)'s visits to you.	1	2	3	4
j.	Her contribution to (CHILD)'s support.	1	2	3	4

A10. Did you do any of the following things for (CHILD) during the past year?

		YES	NO
a.	Buy clothes, toys or presents.	1	5
b.	Pay for camp or lessons.	1	5
c.	Take (CHILD) on vacation.	1	5
d.	Pay for dental or uninsured medical expenses.	1	5
e.	Pay for (his/her) medical insurance.	1	5
f.	Any other things? (SPECIFY):_____	1	5

A11. Next, I will read some statements about raising children. Thinking about (CHILD), please indicate on a scale from 1-5 the number that best describes how true each statement is, where 1 is not at all true, 5 is completely true and 2, 3, and 4 are somewhere in between.

		NOT AT ALL TRUE				COMPLETELY TRUE
a.	(CHILD) seems to be harder to care for than most children.	1	2	3	4	5
b.	There are some things that (CHILD) does that really bothers me a lot.	1	2	3	4	5
c.	I find myself giving up more of my life to meet (CHILD)'s needs than I ever expected.	1	2	3	4	5
d.	I often feel angry with (CHILD).	1	2	3	4	5
e.	I would be doing better in my life without (CHILD).	1	2	3	4	5

A12. How much schooling do you expect that (CHILD) will complete?

01. 11TH GRADE OR LESS	02. GRADUATE FROM HIGH SCHOOL	03. POST-HIGH SCHOOL VOCATIONAL TRAINING
04. SOME COLLEGE	05. GRADUATE FROM 2 YEAR COLLEGE WITH ASSOCIATE'S DEGREE	06. GRADUATE FROM 4 YEAR COLLEGE
07. MASTER'S DEGREE OR TEACHING CREDENTIAL PROGRAM	08. MD, LAW, PHD, OR OTHER DOCTORAL DEGREE	

B0. INTERVIEWER CHECKPOINT

SEE A6, PAGE 2

☐ 1. A6 IS BLANK OR CHILD SPENT 0-11 DAYS WITH DAD IN 1996

→ EXACT TIME NOW:_____

GO TO NEXT CHILD BOOKLET (IF ANY), OR TO HOUSEHOLD BOOKLET

☐ 2. CHILD SPENT 12+ DAYS WITH DAD

B1. Did you take parenting classes prior to the time of (CHILD)'s birth, right after (CHILD)'s birth, during (CHILD)'s first few years, at any other time, or did you never take parenting classes? **(CHECK ALL THAT APPLY)**

A. PRIOR TO THE TIME OF CHILD'S BIRTH	B. RIGHT AFTER CHILD'S BIRTH	C. DURING CHILD'S FIRST FEW YEARS

D. NEVER	E. OTHER TIME (SPECIFY): _____

B2. How did you learn how to be a parent?

		YES	NO
a.	From your mother?	1	5
b.	Father or father-figure?	1	5
c.	Grandmother?	1	5
d.	Friends?	1	5
e.	Books?	1	5
f.	Personal experience such as teen baby sitting?	1	5
g.	Classes such as Lamaze or school courses?	1	5
h.	Television or video?	1	5
i.	Trial and error?	1	5
j.	Any other way? (SPECIFY):_____	1	5

B3. How often do you spend time with (CHILD) in each of the following activities? Would you say not at all, about once a year, several times a year, 1-3 times a month, about once a week, or several times a week?

		NOT AT ALL	ABOUT ONCE A YEAR	SEVERAL TIMES A YEAR	1 TO 3 TIMES A MONTH	ABOUT ONCE A WEEK	SEVERAL TIMES A WEEK
a.	Leisure activities such as picnics, movies, sports, or visiting family friends.	1	2	3	4	5	6
b.	Religious activities.	1	2	3	4	5	6
c.	Talking, working on a project, or playing together.	1	2	3	4	5	6
d.	School or other organized activities.	1	2	3	4	5	6

B4. INTERVIEWER CHECKPOINT

SEE A4, PAGE 1

☐ 1. R HAS SEEN CHILD IN LAST MONTH → NEXT PAGE, B5

☐ 2. R HAS NOT SEEN CHILD IN LAST MONTH → TURN TO P. 8, B7

Child Development Supplement

FATHERS WHO LIVE OUTSIDE THE HOME OF THE TARGET CHILD

Household Questionnaire

The University of Michigan
Survey Research Center
Institute for Social Research
Ann Arbor, MI 48106

SAMPLE LABEL

INTERVIEWER LABEL

THIS STATEMENT MUST BE READ TO ALL RESPONDENTS

This interview is completely voluntary and confidential. If we should come to any question you do not want to answer, let me know and we'll go on to the next question. Your answers will be kept completely confidential.

Date of IW: _____

Length of IW: _____

Length of Edit: _____

EXACT TIME NOW: _____

SECTION A: CONTACT WITH CHILD

A1. Are you currently (re)married or living with a partner, separated, divorced, widowed, or have you never been married?

1. (RE)MARRIED/ ANOTHER PARTNER	2. SEPARATED	3. DIVORCED
4. WIDOWED	5. NEVER MARRIED	

A2. Do you have any children other than those you had with (CHILD)'s mother?

1. YES

5. NO → GO TO A3

A2a. How many other children do you have?

_____ (NUMBER OF CHILDREN)

A3. How many years of schooling did you complete?

_____ YEARS

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